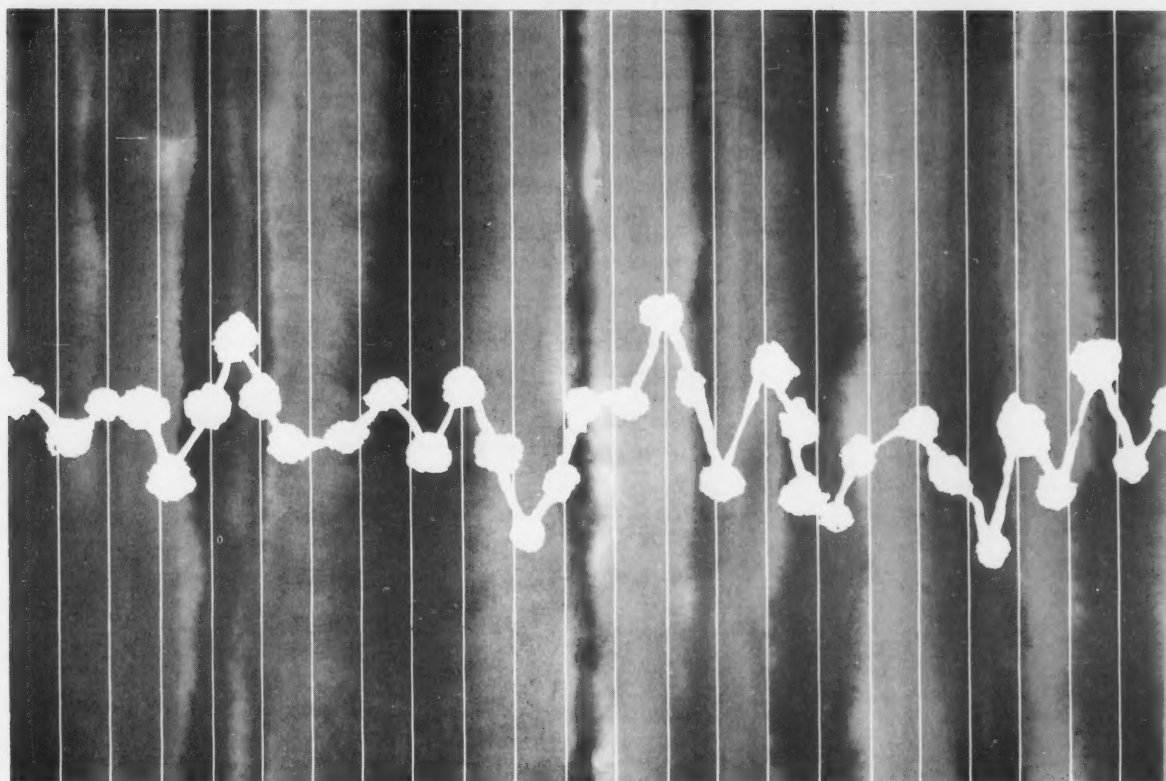


# defense indicators

NOVEMBER 1977



U.S. DEPARTMENT OF COMMERCE • BUREAU OF ECONOMIC ANALYSIS

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This report is prepared in the Statistical Indicators Division, Bureau of Economic Analysis. Technical staff and their responsibilities for the publication are—

**Barry A. Beckman**—Technical supervision and review.

**Morton Somer**—Selection of seasonal adjustment methods.

**Betty F. Tunstall**—Collection and compilation of basic data.

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The Secretary of Commerce has determined that the publication of this periodical is necessary in the transaction of the public business required by law of this Department. Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget through September 1, 1980.

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# defense indicators

**November 1977**

**Series ES4 No. 77-11**

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**6 BEA PROJECTS**  
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**BUSINESS CONDITIONS DIGEST** A monthly report for analyzing economic fluctuations over a short span of years.

This report brings together many of the economic time series found most useful by business analysts and forecasters. The dominant feature is the cyclical indicators section in which approximately 110 business cycle indicators are each assigned a three-way timing classification according to their cyclical behavior at peaks, at troughs, and at all turns. This section also contains other valuable aids for the analysis of business conditions and prospects, such as composite indexes of leading, coincident, and lagging indicators and various diffusion indexes. A second section contains other important economic measures such as prices, wages, productivity, government activities, U.S. international transactions, and international comparisons.

Data are presented in charts and tables. Appendixes provide historical data, series descriptions, seasonal adjustment factors, and measures of variability. A computer tape containing data for most of the series is available for purchase.

**DEFENSE INDICATORS** A monthly report for analyzing the current and prospective impact of defense activity on the national economy.

This report brings together the principal time series on defense activities which influence short-term changes in the national economy. These include series on obligations, contracts, orders, shipments, inventories, expenditures, employment, and earnings. The approximately 60 time series included are grouped in accordance with the time at which the activities they measure occur in the defense order-production-delivery process. Charts and analytical tables facilitate interpretation.

**LONG TERM ECONOMIC GROWTH** A report for the study of economic trends over a long span of years, 1860-1970.

This report has been developed from available statistics to provide a comprehensive, long-range view of the U.S. economy. It is a basic research document for economists, historians, investors, teachers, and students. It brings together under one cover, in meaningful and convenient form, the complete statistical basis for a study of long-term economic trends. A computer tape file of the time series included in the report is available for purchase.

**COMPUTER PROGRAMS FOR TIME SERIES ANALYSIS** The source statements for FORTRAN IV programs used by BEA in its analysis of time series are available on a single computer tape.

**SEASONAL ADJUSTMENT PROGRAMS.**—Two variants of the Census computer program for measuring and analyzing seasonal, trading-day, cyclical, and irregular fluctuations. They are particularly useful in analyzing economic fluctuations which take place within a year. The X-11 variant is used for adjusting monthly data and the X-11Q for quarterly data. These programs make additive as well as multiplicative adjustments and compute many summary and analytical measures.

**DIFFUSION INDEX PROGRAM.**—A computer program for computing diffusion indexes, cumulated diffusion indexes, and summary measures of the properties of each index.

**SURVEY OF CURRENT BUSINESS** A monthly report for analyzing current economic developments.

This report provides a useful combination of current data for more than 2,500 statistical series and significant articles analyzing economic developments. These data and analyses include such areas as the national income and product accounts, the balance of payments accounts, plant and equipment expenditures, regional personal income, and the input-output accounts.

**BUSINESS STATISTICS** A biennial reference volume containing statistical series reported currently in the *Survey of Current Business*.

This report provides historical data back to 1947 for nearly 2,500 time series. The series are accompanied by concise descriptions as to their composition, methods of compilation, comparability, revisions, and availability. Also listed are the names and addresses of organizations which provide the basic data for the series.



## Introduction

The purpose of this monthly report is to bring together the principal time series on defense activity which influence short-term changes in the national economy. These include series on obligations, contracts, orders, shipments, inventories, expenditures, employment, and earnings. Most are monthly but a few quarterly series are included. The series numbers used are for identification purposes only and do not reflect relationships or order.

### Classification of Series

Chart 1 compares Government purchases of goods and services for national defense with total gross national product. GNP is the market value of the final output of goods and services produced by the Nation's economy and represents a very broad measure of aggregate economic activity. In addition to national defense purchases, it includes Federal Government purchases of goods and services for nondefense purposes, State and local government purchases, personal consumption expenditures, gross private domestic investment, and net exports of goods and services. Chart 1 also presents national defense purchases as a percent of gross national product and, for both series, changes from the previous quarter.

A related group of series is shown in Chart 4, "Defense Related Balance of Payments Components." These series show the effects of defense-related economic activity on the balance of payments accounts.

The remaining series are grouped in accordance with the time at which the activities they measure occur within the defense order-production-delivery process. Those series measuring activities that usually precede production, such as new orders placed with defense products industries and contract awards, are presented in Chart 2, "Advance Indicators of Defense Activity." Chart 3, "Intermediate and Final Indicators of Defense Activity," presents series that measure activities which tend to move at the same time as production (such as employment) and activities which usually follow production (such as shipments).

### Series Included

Following is a list of the series as they appear in charts 1, 2, 3, and 4 (the source agencies are abbreviated in parentheses; detailed lists of sources for charts 1, 2, and 3 appeared as appendices to the August and October 1968 issues of this report).

#### Gross National Product and National Defense Purchases

- Gross national product (BEA)
- Federal Government purchases of goods and services, national defense (BEA)
- National defense purchases as a percent of gross national product (BEA)
- Gross national product, changes from previous quarter (BEA)
- National defense purchases, changes from previous quarter (BEA)

#### Advance Indicators of Defense Activity

- Defense Department gross obligations incurred, total (DOD)
- Defense Department gross obligations incurred, procurement (DOD)
- Gross obligations incurred outside the Government for national defense (Treasury)

- Defense Department military prime contract awards for work performed in the United States (DOD)
- Defense Department gross unpaid obligations outstanding (DOD)
- Manufacturers' new orders (Census):
  - Defense products industries
  - Defense products
- Manufacturers' new orders from the U.S. Government, aerospace industries (Census):
- Average weekly overtime hours, production workers, defense products industries (BLS)
- Accession rate, defense products industries (BLS)
- Layoff rate, defense products industries (BLS)

#### Intermediate and Final Indicators of Defense Activity

- Output of defense and space equipment (FRB)
- Manufacturers' inventories (Census):
  - Defense products industries
  - Defense products
- Manufacturers' unfilled orders (Census):
  - Defense products industries
  - Defense products
- Manufacturers' unfilled orders from the U.S. Government, aerospace industries (Census)
- Defense Department progress payments outstanding (DOD)
- Employment in defense products industries, total (BLS)
- Employment in defense products industries, production workers (BLS)
- Index of aggregate weekly hours, defense products industries (BLS)
- Index of aggregate weekly payrolls, production workers, defense products industries (BLS)
- Defense Department personnel, military, active duty (DOD)
- Defense Department personnel, civilian, direct hire employment (DOD)
- Defense Department net outlays, total, military functions and military assistance (DOD)
- Defense Department net outlays, procurement (DOD)
- Budget outlays for the national defense function (Treasury)
- Defense Department personnel compensation (DOD)
- Manufacturers' shipments (Census):
  - Defense products industries
  - Defense products
- Manufacturers' shipments to the U.S. Government, aerospace industries (Census)
- Ratio, manufacturers' unfilled orders to shipments (Census):
  - Defense products industries
  - Defense products
- Ratio, manufacturers' inventories to shipments (Census):
  - Defense products industries
  - Defense products

#### Defense-Related Balance of Payments Components

- Transfers under U.S. military agency sales contracts—exports (BEA)
- Direct defense expenditures—imports (BEA)
- U.S. Government cash receipts associated with military sales contracts (BEA)

Some additional data are included in the tables though not presented in the charts. These include Defense Department military prime contract awards by procurement category (e.g., for aircraft, missiles and space systems, ships, weapons, and ammunitions), the operations component of Defense Department

gross obligations incurred, gross unpaid obligations outstanding, and net outlays and the procurement component of gross unpaid obligations outstanding.

#### Description of Basic Data

The Department of Defense compiles statistics on obligations, contract awards, personnel compensation, and outlays. The DOD obligations and outlays data are based on the Defense Department's monthly *Status of Funds* report which is developed from accounting data and is designed to provide information on the total status of Defense Department financing. Accounts included in this report are aggregated by appropriation categories including personnel costs, operations and maintenance, procurement, research and development, and construction. The *Status of Funds* report duplicates some obligations. That is, obligations of one government unit to another unit are not netted out.

The Defense Department's *Contract Awards* report covers the awarding of procurement contracts. These include obligations for operating and maintenance supplies, equipment and services, research and development, and construction in addition to the obligations for items that constitute the fiscal "procurement" category. The statistics are aggregated by commodity categories including aircraft, missile and space systems, ships, weapons, ammunition, electronics and communication equipment, fuels, and textiles and clothing. The *Contract Awards* report includes procurement for NASA, other nondefense agencies, and the Foreign Military Sales Program which are not included in the *Status of Funds* report.

The Census quarterly new orders, unfilled orders and shipments series for "aerospace industries" are based on reports of companies classified into the following industry categories:

Industry	SIC Code
Aircraft and parts .....	372
Guided missiles and space vehicles, completely assembled ..	1925

The Census and BLS data for "defense products industries" presented in this report cover companies and establishments<sup>1</sup> classified into the following industry categories in accordance with the *Standard Industrial Classification Manual*, 1967 edition, Executive Office of the President, Bureau of the Budget:

Industry	SIC Code
Ordnance and accessories .....	19
Communication equipment .....	366
Aircraft and parts .....	372

Establishments reporting to the BLS are classified into industries on the basis of their principal product or activity as determined from information on annual sales volume, which is collected each year on a supplement to the monthly report. The entire employment of an establishment making more than one product or engaging in more than one activity is included under the industry accounting for the largest percentage of the annual sales of that establishment.

The Census Bureau's monthly survey is based primarily on reports at the company level and the monthly estimates are benchmarked to the establishment data from the *Annual Survey*

of *Manufactures*. Also, many of the large diversified companies file separate divisional reports monthly. Although the reports in the survey are also classified according to their principal product or activity, this difference in the organizational level from which reports are received results in firms being classified into different industries in the BLS and Census surveys and, consequently, limits somewhat the comparability of the data collected by these agencies. However, as we know from past studies in this area, some differences in industrial classification between BLS and Census data would remain even if reports came from the same organizational levels.

Both the Census and the BLS data include a significant amount of nondefense activities carried on by companies and establishments classified in the above industries. For example, the data cover the production of commercial as well as military aircraft. On the other hand, they exclude significant amounts of defense work carried on by companies and establishments classified in industries other than those listed above (e.g., the manufacture of military uniforms and the shipbuilding industry).<sup>2</sup>

Census data for "defense products" are based on separate reports on defense work filed by large defense contractors in the ordnance, communications, complete aircraft, aircraft parts, and shipbuilding industries. Thus, they differ from the "defense products industries" data in that they include defense activity in the shipbuilding industry and exclude nondefense work in the other industries covered. Defense products data cover work for the Department of Defense and exclude contracts for the National Aeronautics and Space Administration and the Atomic Energy Commission.

The DOD data are not strictly comparable in coverage with either the BLS or the Census data since the Defense Department figures (1) cover products of industries not included in the defense products category; (2) generally do not include non-defense activities (except that some series, such as contract awards, include activities by the Department of Defense on behalf of nondefense agencies); and (3) do not cover intermediate activities such as those related to subcontracting and supplying of parts. Thus, the Census Bureau data for manufacturers' new orders and shipments of defense products industries, for example, differ in coverage from the DOD contract awards and net outlays series.

The Department of Defense data are not comparable with Federal Government purchases of goods and services for national defense or the Treasury Department obligations and outlays data since the BEA and Treasury data cover defense-related activities of other agencies such as the Atomic Energy Commission, the Selective Service System, and the Office of Emergency Planning.

Projects to improve the comparability of the data collected by the Bureau of the Census, the Bureau of Labor Statistics, and the Department of Defense and to improve the separation of defense and nondefense activity for the Census and BLS data are being undertaken by the statistical agencies under the leadership of the Interagency Committee mentioned earlier in this report.

<sup>2</sup>See the Bureau of the Census publication *Shipments of Defense-Oriented Industries*, Current Industrial Reports, Series MA-175, for annual estimates of shipments by industry to the Department of Defense, the National Aeronautics and Space Administration, and the Atomic Energy Commission. Included also are industries not covered by the "defense products industries" category.

<sup>1</sup>An establishment is a single physical location where business is conducted (e.g., a plant). A company often includes more than one establishment.

## Variability of Data

Seasonal variations dominate the movements of many time series, and adjustments for average seasonal fluctuations are often necessary to bring out the underlying trends of the series. These seasonal adjustments allow for the effects of repetitive intrayear variations resulting primarily from normal differences in weather conditions and from various institutional arrangements. An additional adjustment is sometimes necessary for series which contain considerable variation resulting from the number of working or trading days in each month. As used in this report, the term "seasonal adjustment" includes trading-day adjustments where they have been made.

Most of the series in this report are shown in seasonally adjusted form. For Defense Department and BLS series, unadjusted data are also shown since they are not readily available elsewhere. Current seasonal adjustment factors are shown in appendix A.

The effect of seasonal adjustment in reducing the month-to-month variation in the data can be seen in appendix B. There, the first two columns show the average month-to-month percent change (without regard to sign) in the data before and after seasonal adjustment. Some series still show very irregular month-to-month movements after adjustment for seasonal variation. The measures in appendix B also indicate the month-to-month variation in the irregular and short-term trend components of the series. For many series, irregular movements tend to dominate 1- or 2-month comparisons, and the underlying short-term trend becomes dominant in comparisons over longer spans. The "months for cyclical dominance" (MCD) measure estimates the span of months required for the short-term trend to dominate the irregular component. Series with an MCD of 4 or more are supplemented with a moving average (with the

number of terms equal to MCD) in the charts. Data for these moving averages are listed in the basic data tables.

## Guide to Charts and Tables

Most series are plotted on a standard ratio scale so that equal percent changes cover the same vertical distance. For these series, an increase of 100 percent covers approximately 1 inch. Arithmetic scales are used for series with zero or negative data, series which could approach zero (e.g., average overtime hours and layoff rate), and series expressed in percent.

In general, monthly data are plotted with a solid line and quarterly data are represented by a solid line with quarterly plot points. Quarterly series are also identified with a "Q" after their titles. For series which include a moving average, a dashed line is used for the actual monthly data and a solid line for the moving average. (The moving average values are centered within the span of months they are computed from.) Exceptions to this scheme may be necessary for special situations. Data apply to the whole period except for series designated "EOM" (end of month) or "EOQ" (end of quarter). The number in the box at the right of each series indicates the latest month (Arabic) or quarter (Roman) plotted. Parallel lines across a series indicate a break in continuity (e.g., data not available or change in series definition).

Tables 1, 2, 3, and 4 present current data for the series shown in the charts, including the moving averages. They also include unadjusted data for some series and data for related series which are not plotted. Table A summarizes the most recent data and percent changes for many of the series in the report. Historical data are shown on an intermittent basis in appendix C. (The index indicates the appropriate issue for each series.)

## New Features and Changes for This Issue

1. Current seasonal adjustment factors, which are based on historical data patterns, are inaccurate for some defense series because of the change in the Government's fiscal year, and suitable seasonal factors cannot be established at this time. For this reason, seasonally adjusted data are not shown for Defense Department gross obligations incurred (series 617, 619, and 621) and Defense Department military prime contract awards, total (series 625) for the period since May 1977, nor are they shown for the components of military prime contract awards (series 626, 627, 629-637, and 640) for the period since the first quarter 1977. For these series, unadjusted data are shown in the data tables and seasonal adjustment factors on the old basis are shown in appendix A.

2. Appendix C contains historical data for series 617, 619, 621, 623, and 683.

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The December issue of *DEFENSE INDICATORS* is scheduled for release on December 30.



# Table A. Summary of Recent Data and Current Percent Changes for Principal Defense Indicators

(Preliminary and revised figures are not identified here but the user may consult tables 1, 2, 3, and 4 where such identification is given)

Series title	Unit of measure	Basic data								Percent change				Series number
		Average		1st Q 1977	2d Q 1977	3d Q 1977	Aug. 1977	Sept. 1977	Oct. 1977	Aug. '77 to Sept. '77	Sept. '77 to Oct. '77	1st Q '77 to 2d Q '77	2d Q '77 to 3d Q '77	
		1975	1976											
GROSS NATIONAL PRODUCT AND NATIONAL DEFENSE PURCHASES														
200. Gross national product (BEA) .....	Ann. rate, bil. dol. ....	1528.8	1706.5	1810.8	1869.9	1914.9	...	...	...	...	...	3.3	2.4	200
264. Federal Government purchases of goods and services, national defense (BEA) .....	.... do .....	83.9	86.8	89.7	93.4	96.0	...	...	...	...	...	4.1	2.8	264
613. National defense purchases as a percent of GNP (BEA) <sup>1</sup> .....	Percent .....	5.5	5.1	5.0	5.0	5.0	...	...	...	...	...	0.0	0.0	613
ADVANCE INDICATORS OF DEFENSE ACTIVITY														
Defense Dept. gross obligations incurred (DOD):														
817. Total .....	Ann. rate, bil. dol. ....	98.5	109.9	117.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	617
821. Procurement .....	.... do .....	20.4	24.6	24.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	621
623. Gross obligations incurred outside the Federal Government for national defense (Treasury) .....	.... do .....	104.1	117.9	126.3	124.9	NA	NA	NA	NA	NA	NA	-1.1	NA	623
625. Defense Department military prime contract awards for work performed in the U.S. (DOD) .....	.... do .....	43.3	50.1	51.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	625
643. Defense Department gross unpaid obligations outstanding (DOD) .....	Bil. dol., end of period .....	41.3	50.1	52.4	53.3	NA	48.8	NA	NA	NA	NA	1.7	NA	643
648. Mfrs.' new orders, defense products (Census) .....	Ann. rate, bil. dol. ....	25.2	29.5	24.2	36.3	22.2	24.0	19.6	51.8	-18.3	164.3	50.0	-38.8	648
650. Manufacturers' new orders from the U.S. Government, aerospace industries (Census) .....	.... do .....	18.3	21.2	18.0	25.7	NA	...	...	...	...	...	42.8	NA	650
653. Average weekly overtime hours, production workers, defense products industries (BLS) <sup>1</sup> .....	Hours .....	2.5	2.5	2.8	3.0	2.8	2.6	2.8	NA	0.2	NA	0.2	-0.2	653
654. Accessions, defense products industries (BLS) <sup>1</sup> .....	Number per 100 employees .....	1.4	1.6	2.3	2.2	NA	2.0	NA	NA	NA	NA	-0.1	NA	654
655. Layoffs, defense products industries (BLS) <sup>1</sup> .....	.... do .....	1.2	0.7	0.5	0.4	NA	0.5	NA	NA	NA	NA	-0.1	NA	655
INTERMEDIATE AND FINAL INDICATORS OF DEFENSE ACTIVITY														
657. Output of defense and space equipment (FRB) .....	1967=100 ....	80.0	78.4	78.3	80.1	80.7	80.8	80.8	78.4	0.0	-3.0	2.3	0.7	657
658. Mfrs.' inventories, defense products (Census) .....	Bil. dol., end of period .....	6.6	6.6	6.5	6.9	6.9	6.9	6.9	NA	0.0	NA	6.2	0.0	659
661. Mfrs.' unfilled orders, defense products (Census) .....	.... do .....	29.2	32.2	30.4	31.9	29.8	30.7	29.8	31.6	-2.9	6.0	4.9	-6.6	661
664. Manufacturers' unfilled orders from the U.S. Government, aerospace industries (Census) .....	.... do .....	21.8	21.7	23.0	24.3	NA	...	...	...	...	...	5.7	NA	664
666. Defense Department progress payments outstanding (DOD) .....	.... do .....	11.3	8.5	8.5	8.7	NA	...	...	...	...	...	2.4	NA	666
Employment in defense products industries (BLS):														
670. Total .....	Thousands .....	1,118	1,064	1,066	1,081	1,087	1,084	1,084	NA	0.0	NA	1.4	0.6	670
671. Production workers .....	.... do .....	570	531	529	540	546	545	546	NA	0.2	NA	2.1	1.1	671
673. Index of aggregate weekly hours, defense products industries (BLS) .....	1967=100 ....	66.0	62.8	63.4	64.4	64.8	64.7	64.5	NA	-0.3	NA	1.6	0.6	673
675. Index of aggregate weekly payrolls, production workers, defense products industries (BLS) .....	.... do .....	100.5	101.2	107.2	112.6	115.3	114.5	116.2	NA	1.5	NA	5.0	2.4	675
Defense Department personnel (DOD):														
677. Military, active duty .....	Thousands, end of period .....	2,084	2,072	2,075	2,075	2,075	2,073	2,075	2,072	0.1	-0.1	0.0	0.0	677
678. Civilian, direct hire employment .....	.... do .....	1,028	995	995	1,009	982	998	982	NA	-1.6	NA	1.4	-2.7	678
Defense Department net outlays (DOD):														
680. Total, military functions and military assistance .....	Ann. rate, bil. dol. ....	88.5	88.3	95.6	93.9	105.1	100.4	107.3	97.1	6.9	-9.5	-1.8	11.9	680
682. Procurement .....	.... do .....	16.2	16.4	18.5	17.4	18.8	18.6	16.7	18.0	-10.2	7.8	-5.9	8.0	682
683. Budget outlays for the national defense function (Treasury) .....	.... do .....	92.5	89.1	96.7	95.2	107.7	100.4	108.9	99.5	8.5	-8.6	-1.6	13.1	683
685. Defense Dept. personnel compensation (DOD) .....	.... do .....	34.6	35.5	36.1	37.2	37.4	37.3	37.9	NA	1.6	NA	3.0	0.5	685
688. Mfrs.' shipments, defense products (Census) .....	.... do .....	23.7	26.5	31.5	30.5	30.6	30.0	30.8	29.5	2.7	-4.2	-3.2	0.3	688
689. Manufacturers' shipments to the U.S. Government, aerospace industries (Census) .....	.... do .....	17.3	19.1	21.1	20.2	NA	...	...	...	...	...	-4.3	NA	689
691. Ratio, manufacturers' unfilled orders to shipments, defense products (Census) .....	Ratio .....	14.5	13.5	11.8	12.5	12.0	12.3	11.6	12.9	-5.7	11.2	5.9	-4.0	691
693. Ratio, manufacturers' inventories to shipments, defense products (Census) .....	.... do .....	3.1	3.0	2.5	2.6	2.7	2.8	2.7	NA	-3.6	NA	4.0	3.8	693
DEFENSE-RELATED BALANCE OF PAYMENTS COMPONENTS														
546. Transfers under U.S. military agency sales contracts—exports (BEA) <sup>1</sup> .....	Ann. rate, mil. dol. ....	3,919	5,213	7,380	7,468	NA	...	...	...	...	...	88	NA	546
547. Direct defense expenditures—imports (BEA) <sup>1</sup> .....	.... do .....	4,795	4,847	5,316	5,612	NA	...	...	...	...	...	296	NA	547
696. U.S. Government cash receipts associated with military sales contracts (BEA) <sup>1</sup> .....	.... do .....	4,587	8,213	7,968	7,540	NA	...	...	...	...	...	-428	NA	696

NOTE: This table is presented as a convenient summary of the current data for many of the indicators in this report. In many cases, data shown here are rounded to fewer digits or are in different units than those shown in tables 1, 2, 3, and 4. Where available, annual figures are those published by the source agencies; otherwise they (and the quarterly figures for monthly series) are averages or totals of the data as shown in the data tables. Series are seasonally adjusted except for those indicated by (U), which appear to contain no seasonal movement.

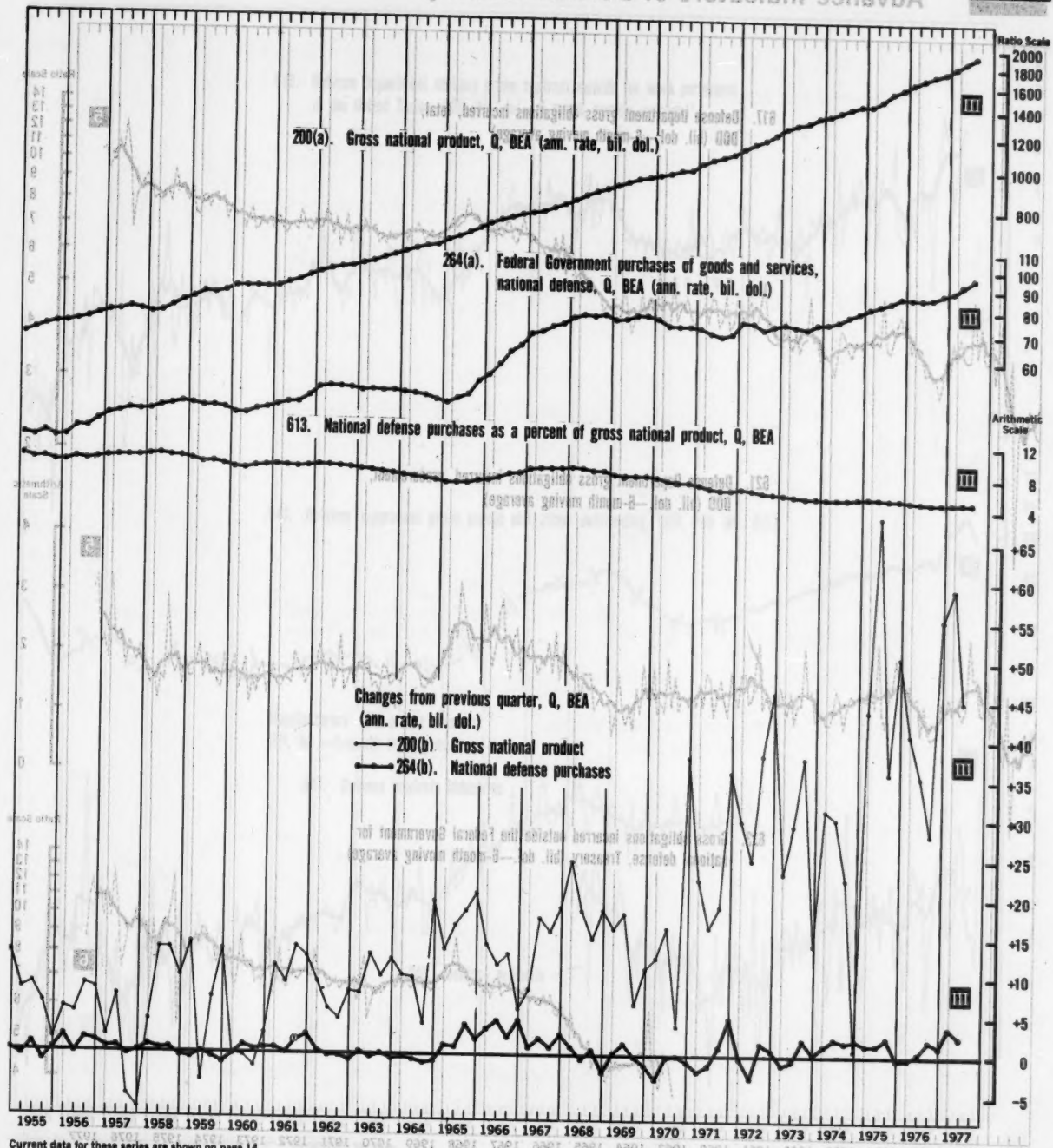
NA = not available. <sup>2</sup>Differences rather than percent changes are shown for this series.



CHART

1

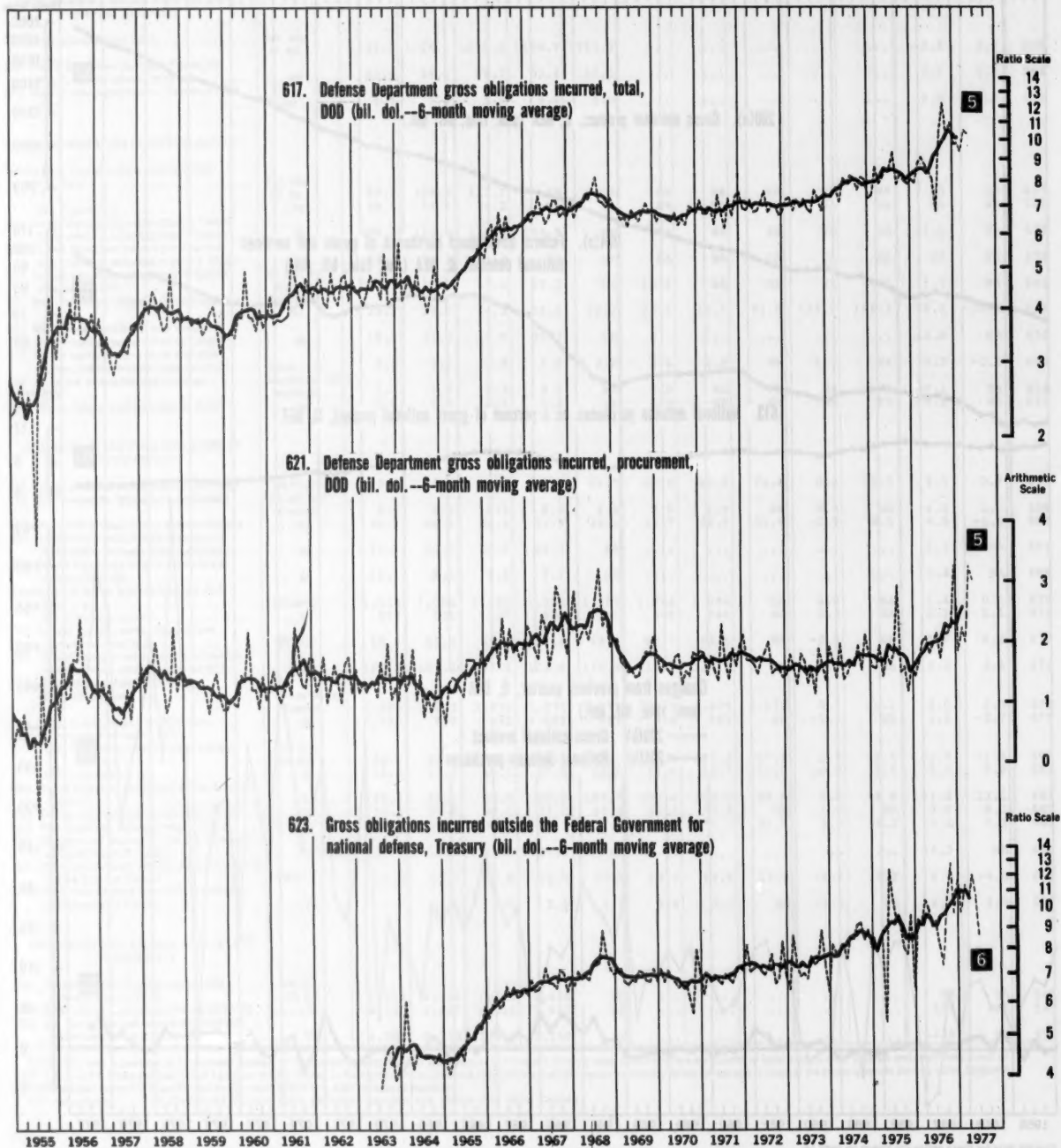
# Gross National Product and National Defense Purchases



CHART

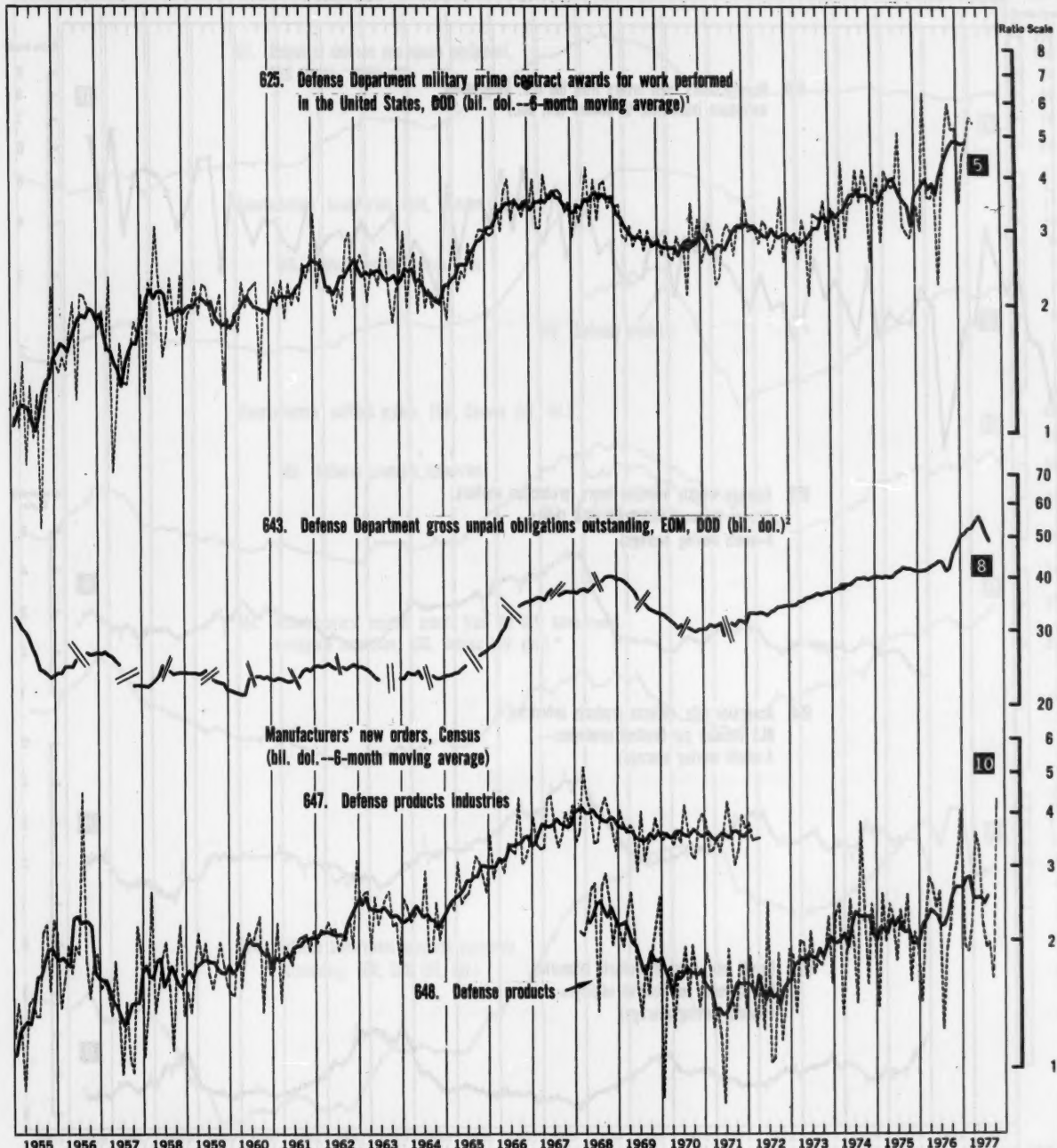
2

## Advance Indicators of Defense Activity



Current data for these series are shown on pages 15 and 16.

# Advance Indicators of Defense Activity--Continued



<sup>1</sup> Data prior to July 1955 exclude orders written to other Government agencies.

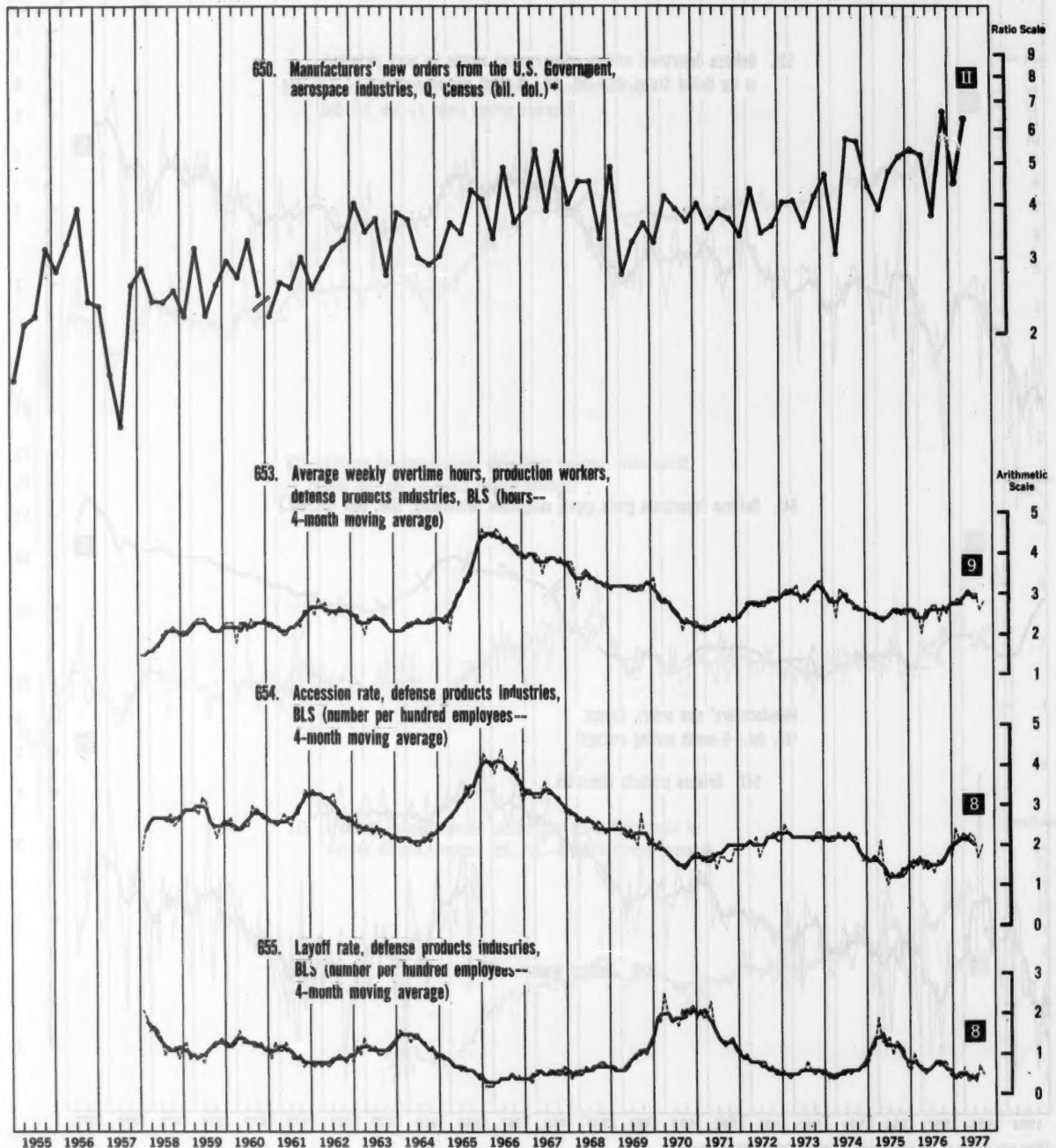
<sup>2</sup> Data for the following months not available: July of 1956-71; August of 1956-57 and 1963-66; September of 1957, 1963, and 1969; and October and November of 1963. Current data for these series are shown on pages 16 and 20

defense indicators

CHART

2

Advance Indicators of Defense Activity--Continued



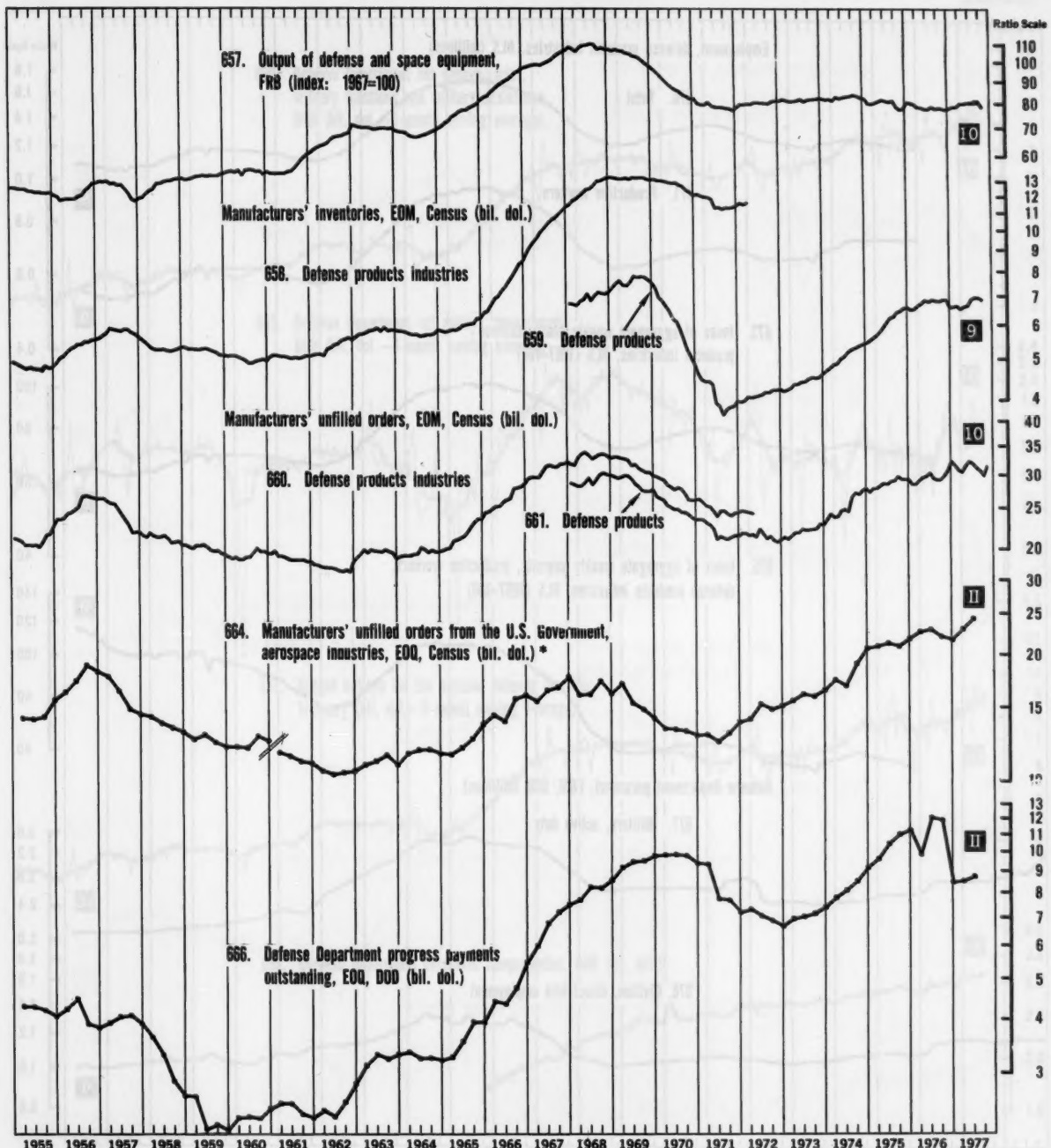
\*Data prior to 1961 include orders from non-Government customers.  
Current data for these series are shown on pages 20 and 21.



CHART

3

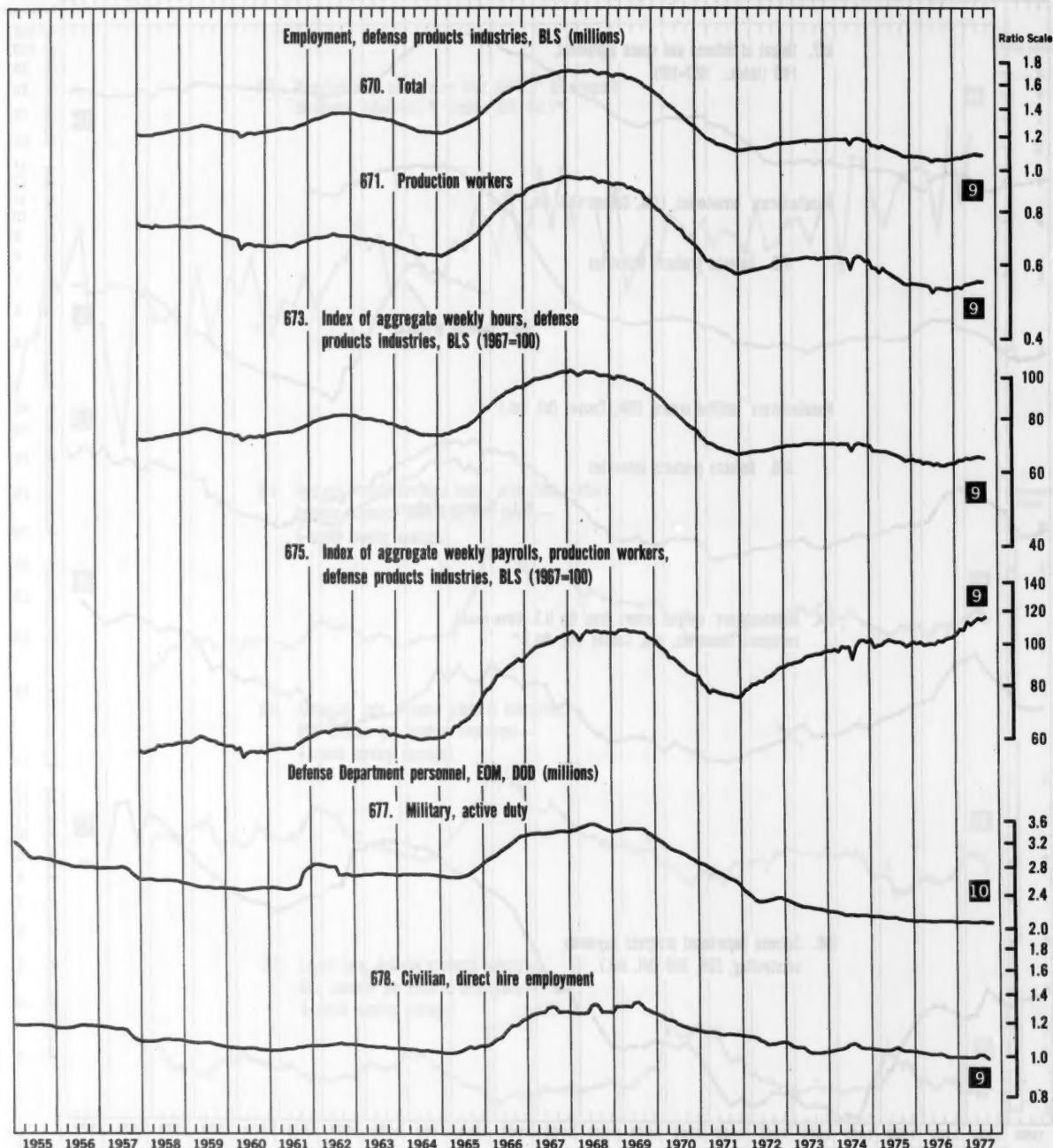
# Intermediate and Final Indicators of Defense Activity



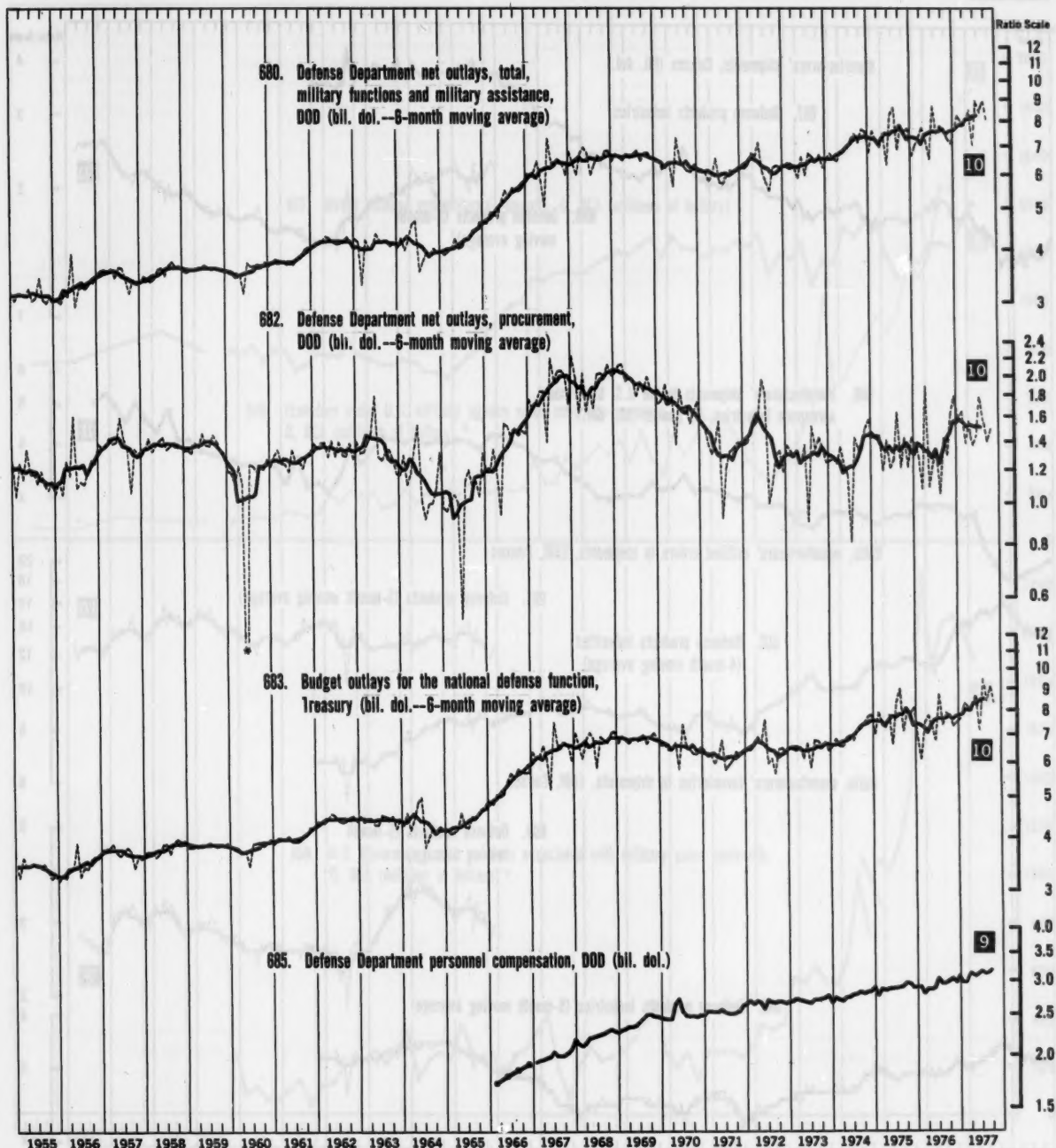
\*Data prior to 1961 include orders from non-Government customers.  
Current data for these series are shown on page 22.

CHART  
3

# Intermediate and Final Indicators of Defense Activity--Continued



# Intermediate and Final Indicators of Defense Activity--Continued

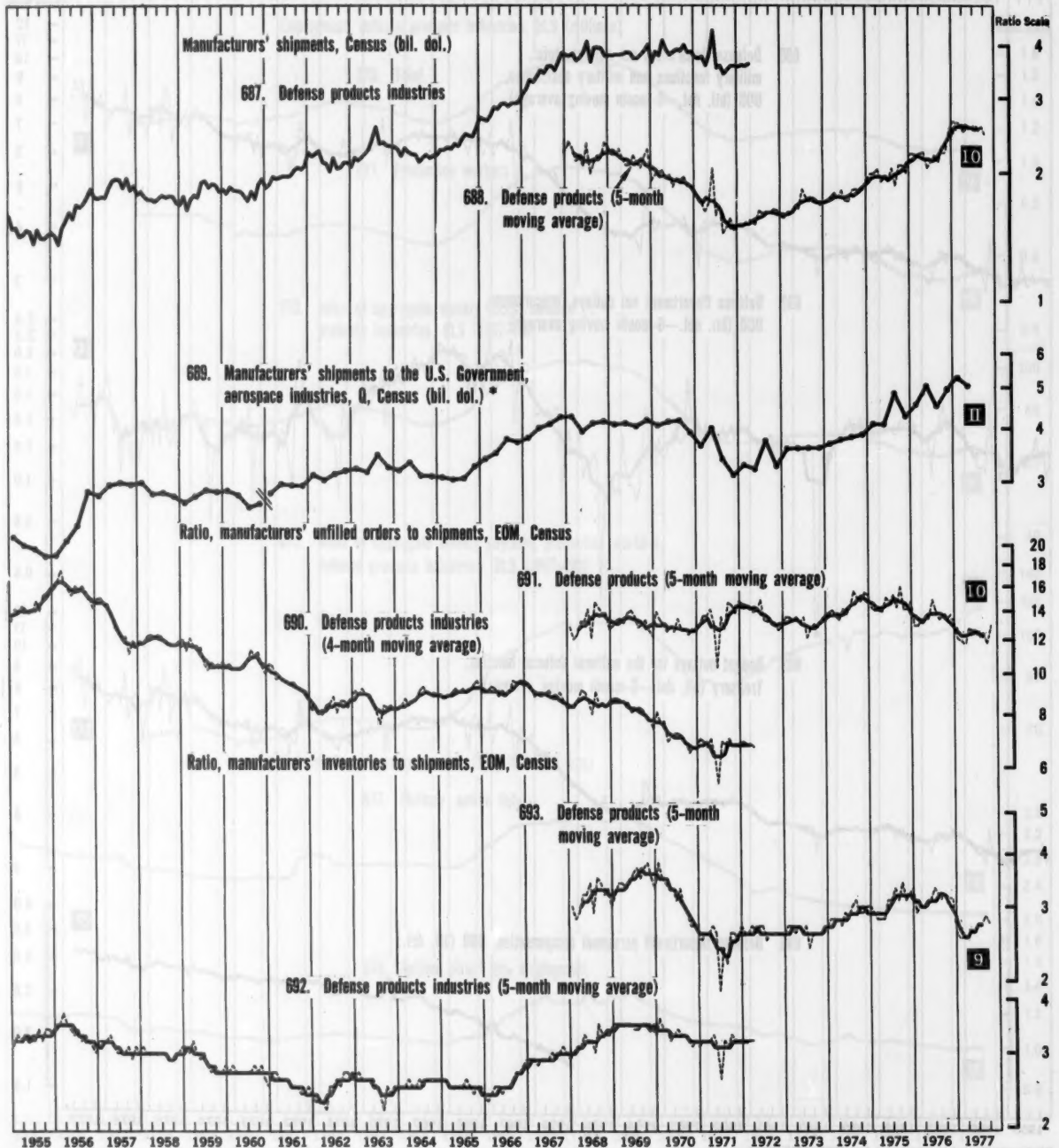


\*Net expenditures for procurement, June 1960--\$245 million.  
Current data for these series are shown on pages 24 and 25.

CHART

3

# Intermediate and Final Indicators of Defense Activity--Continued



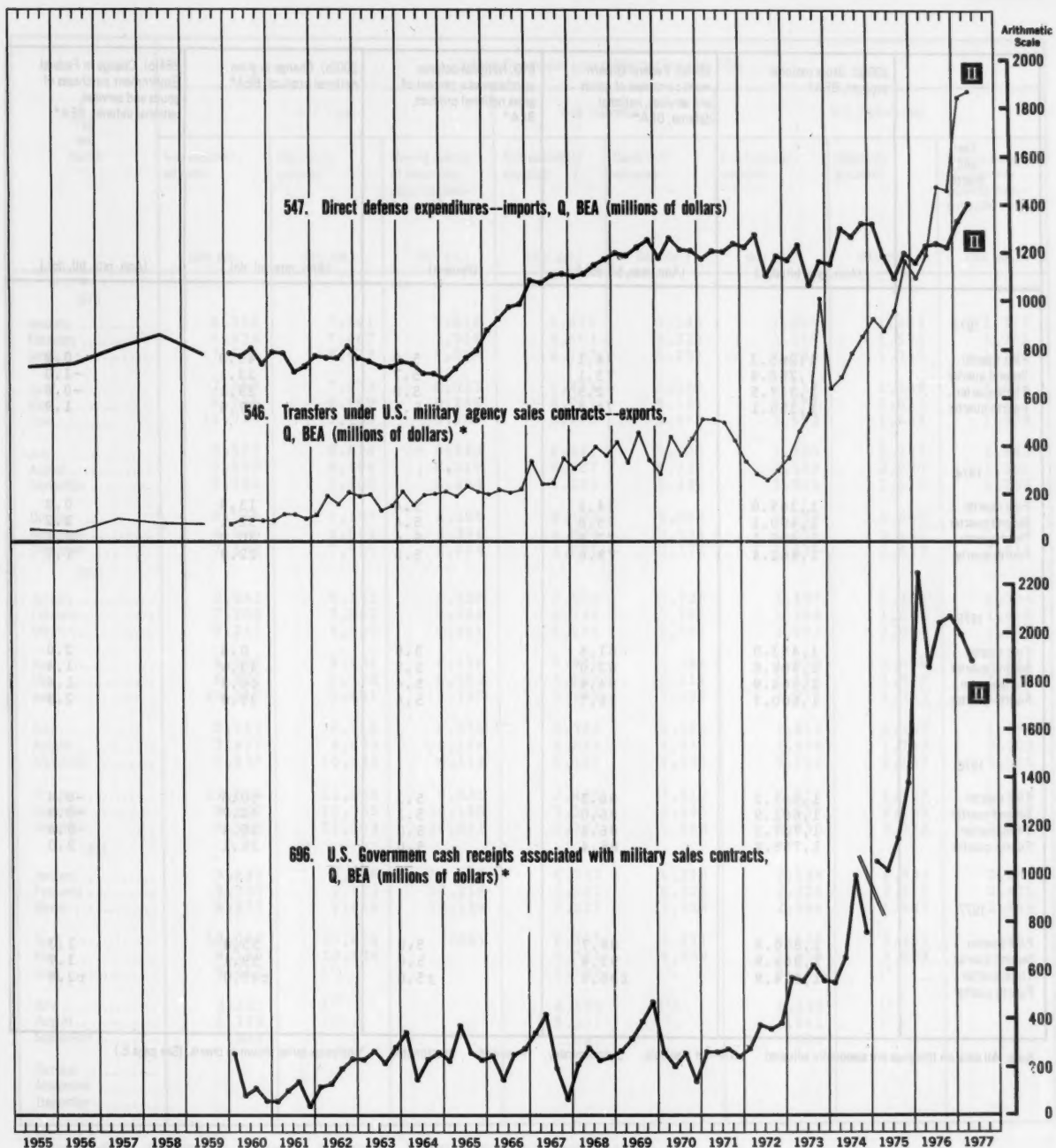
\*Data prior to 1961 include shipments to non-Government customers.  
Current data for these series are shown on page 26.



CHART

4

# Defense-Related Balance of Payments Components



\*See footnotes 1 and 2 on page 27.  
Current data for these series are shown on page 27.

# defense indicators

TABLE

1

## Gross National Product and National Defense Purchases

Year and quarter	200(a). Gross national product, BEA*	264(a). Federal Government purchases of goods and services, national defense, BEA*	613. National defense purchases as a percent of gross national product, BEA*	200(b). Change in gross national product, BEA*	264(b). Change in Federal Government purchases of goods and services, national defense, BEA*
	(Ann. rate, bil. dol.)	(Ann. rate, bil. dol.)	(Percent)	(Ann. rate, bil. dol.)	(Ann. rate, bil. dol.)
1973					
First quarter . . . . .	1,265.3	74.1	5.9	45.9	0.8
Second quarter . . . . .	1,288.4	73.1	5.7	23.1	-1.0
Third quarter . . . . .	1,317.5	72.5	5.5	29.1	-0.6
Fourth quarter . . . . .	1,355.1	74.4	5.5	37.6	1.9
1974					
First quarter . . . . .	1,369.0	74.6	5.4	13.9	0.2
Second quarter . . . . .	1,400.1	75.8	5.4	31.1	1.2
Third quarter . . . . .	1,430.1	77.9	5.4	30.0	2.1
Fourth quarter . . . . .	1,452.4	79.6	5.5	22.3	1.7
1975					
First quarter . . . . .	1,453.0	81.6	5.6	0.6	2.0
Second quarter . . . . .	1,496.6	83.0	5.5	43.6	1.4
Third quarter . . . . .	1,564.9	84.4	5.4	68.3	1.4
Fourth quarter . . . . .	1,600.7	86.7	5.4	35.8	2.3
1976					
First quarter . . . . .	1,651.2	86.3	5.2	50.5	-0.4
Second quarter . . . . .	1,691.9	86.0	5.1	40.7	-0.3
Third quarter . . . . .	1,727.3	86.4	5.0	35.4	0.4
Fourth quarter . . . . .	1,755.4	88.4	5.0	28.1	2.0
1977					
First quarter . . . . .	1,810.8	89.7	5.0	55.4	1.3
Second quarter . . . . .	1,869.9	93.4	5.0	59.1	3.7
Third quarter . . . . .	r1,914.9	r96.0	r5.0	r45.0	r2.6
Fourth quarter . . . . .					

Note: All data on this page are seasonally adjusted. NA=not available; p=preliminary; r=revised; e=estimated. \*Indicates series shown in charts. (See page 5.)

## Advance Indicators of Defense Activity

Year and month	Defense Department gross obligations incurred, DOD							
	617. Total			619. Operations		621. Procurement		
	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data—6-month*	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data—6-month*
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1975								
January .....	8,252	7,341	7,916	5,471	5,148	1,895	1,603	1,772
February .....	6,904	7,467	7,958	4,604	5,220	1,569	1,575	1,755
March .....	7,526	8,677	7,956	4,787	5,251	1,994	1,960	1,701
April .....	7,403	7,933	8,033	5,424	5,209	1,147	1,448	1,674
May .....	6,796	8,199	8,246	4,761	5,121	1,147	1,813	1,711
June .....	11,027	8,583	8,569	6,275	5,560	2,693	1,644	1,939
July .....	9,903	8,614	8,440	6,641	5,624	1,510	1,827	1,865
August .....	9,812	9,406	8,516	5,337	5,327	2,508	2,940	1,891
September .....	7,705	7,907	8,494	5,203	5,442	1,506	1,515	1,790
October .....	9,045	8,387	8,385	6,130	5,660	1,733	1,605	1,784
November .....	6,976	8,069	8,304	4,829	5,334	1,320	1,206	1,722
December .....	7,156	7,925	8,064	4,895	5,373	1,428	1,612	1,511
1976								
January .....	8,652	8,132	8,220	6,010	5,729	1,697	1,453	1,594
February .....	7,206	7,962	8,344	4,745	5,203	1,664	1,672	1,676
March .....	8,241	8,842	8,461	4,995	5,354	2,093	2,014	1,779
April .....	8,677	9,134	8,556	5,946	5,784	1,688	2,096	1,841
May .....	6,825	8,772	8,553	4,828	5,419	1,155	1,828	1,958
June .....	11,319	8,491	8,365	5,949	5,059	3,218	1,983	1,971
July .....	9,593	8,116	8,628	6,362	5,369	1,812	2,157	1,993
August .....	7,427	6,833	9,148	5,055	5,010	1,458	1,747	2,003
September .....	9,840	10,424	9,412	6,120	6,335	2,152	2,147	2,075
October .....	12,635	12,255	9,831	7,447	7,012	2,312	2,157	2,289
November .....	9,620	10,355	10,120	5,561	6,145	2,497	2,258	2,237
December .....	9,903	11,003	10,641	5,341	5,882	2,855	3,270	2,316
1977								
January .....	9,838	9,848	10,480	6,352	6,114	2,138	1,842	2,289
February .....	8,787	9,963	10,216	5,501	6,223	2,206	2,219	2,471
March .....	8,957	9,458	10,229	5,537	5,928	2,086	1,987	2,599
April .....	10,092	10,668	(NA)	6,365	6,271	2,640	3,251	(NA)
May .....	8,140	10,436		5,344	5,984	1,908	3,024	
June .....	9,450	( <sup>1</sup> )		5,739	( <sup>1</sup> )	2,077	( <sup>1</sup> )	
July .....	8,331	( <sup>1</sup> )		6,195	( <sup>1</sup> )	1,249	( <sup>1</sup> )	
August .....	8,748	( <sup>1</sup> )		5,337	( <sup>1</sup> )	1,861	( <sup>1</sup> )	
September .....	(NA)			(NA)		(NA)		
October .....								
November .....								
December .....								

NA=not available; p=preliminary; r=revised; e=estimated. \*Indicates series shown in charts. (See page 6.)

<sup>1</sup>See "New Features and Changes for This Issue," page 3.

# defense indicators

TABLE

2

## Advance Indicators of Defense Activity--Continued

Year and month	623. Gross obligations incurred outside the Federal Government for national defense, Treasury		Defense Department military prime contract awards for work performed in the United States, DOD						
			625. Total			626. Aircraft		627. Missile and space systems	
	Seasonally adjusted*	Moving average of seasonally adjusted data--8-month*	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data--8-month*	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1975									
January .....	8,069	8,422	3,567	3,693	3,494	1,062	...	346	...
February .....	8,271	7,894	3,321	3,987	3,488	509	1,873	276	1,206
March .....	8,590	8,472	2,625	2,817	3,513	421	...	244	...
April .....	5,335	p8,863	2,914	4,122	3,720	316	...	377	...
May .....	12,426	p9,084	2,713	3,926	3,744	386	1,524	242	1,451
June .....	p10,487	p9,259	6,626	3,773	3,925	732	...	537	...
July .....	9,397	p9,176	4,376	3,842	3,969	810	...	661	...
August .....	9,321	p9,592	5,295	5,072	3,776	1,254	2,413	1,070	1,465
September .....	8,092	p9,137	3,179	3,080	3,600	469	...	379	...
October .....	7,830	8,479	3,174	2,961	3,493	817	...	463	...
November .....	9,697	8,492	2,608	2,872	3,420	373	1,770	498	1,316
December .....	6,537	8,467	2,870	3,130	3,074	483	...	426	...
1976									
January .....	9,476	8,870	3,288	3,407	3,612	546	...	341	...
February .....	9,168	9,235	2,529	2,993	3,716	356	2,744	278	1,234
March .....	10,511	9,142	5,356	6,309	3,832	2,064	...	243	...
April .....	10,022	p9,616	2,600	3,586	3,946	326	...	290	...
May .....	9,137	p9,410	2,563	3,565	3,751	576	2,694	213	1,375
June .....	p9,383	p9,100	6,843	3,817	3,863	1,562	...	602	...
July .....	8,238	p9,114	2,592	2,234	3,633	416	...	287	...
August .....	7,307	p9,557	3,969	3,665	4,025	914	2,011	422	845
September .....	10,597	p9,650	4,934	4,929	4,294	799	...	521	...
October .....	12,679	10,034	6,269	5,942	4,524	896	...	771	...
November .....	9,698	10,290	4,580	5,175	4,731	1,140	3,661	1,060	2,346
December .....	11,684	10,958	4,543	5,198	4,866	1,442	...	639	...
1977									
January .....	9,777	10,938	3,360	3,478	4,851	955	...	355	...
February .....	11,313	10,825	3,685	4,472	4,780	959	2,380	362	1,926
March .....	10,476	10,976	4,325	4,843	4,809	680	...	610	...
April .....	12,000	10,465	4,041	5,513	(NA)	1,274	...	371	...
May .....	10,605	(NA)	3,778	5,351		852	( <sup>1</sup> )	309	( <sup>1</sup> )
June .....	8,617		3,349	( <sup>1</sup> )		695		387	
July .....	(NA)		3,696	( <sup>1</sup> )		1,280		354	
August .....			3,750	( <sup>1</sup> )		494		251	
September .....			(NA)			(NA)		(NA)	
October .....									
November .....									
December .....									

NA=not available; p=preliminary; r=revised; e=estimated. \*Indicates series shown in charts. (See pages 6 and 7.)

<sup>1</sup>See "New Features and Changes for This Issue," page 3.



## Advance Indicators of Defense Activity--Continued

Year and month	Defense Department military prime contract awards for work performed in the United States, DOD--Continued						
	628. Ships, not seasonally adjusted	629. Weapons and ammunition		630. Electronic and communications equipment		631. Combat vehicles	
	(Mil. dol.)	Not seasonally adjusted (Mil. dol.)	Seasonally adjusted (Mil. dol.)	Not seasonally adjusted (Mil. dol.)	Seasonally adjusted (Mil. dol.)	Not seasonally adjusted (Mil. dol.)	Seasonally adjusted (Mil. dol.)
1975							
January .....	325	125	...	414	...	21	...
February .....	251	160	537	331	1,404	66	288
March .....	11	217	...	535	...	52	...
April .....	621	147	...	313	...	23	...
May .....	94	128	577	587	1,305	86	191
June .....	858	672	...	696	...	161	...
July .....	250	52	...	394	...	126	...
August .....	814	126	545	470	1,410	70	259
September .....	439	95	...	430	...	90	...
October .....	80	128	...	435	...	67	...
November .....	114	66	375	445	1,280	14	172
December .....	211	146	...	332	...	62	...
1976							
January .....	310	76	...	263	...	48	...
February .....	124	101	348	305	1,110	26	238
March .....	1,213	148	...	442	...	61	...
April .....	306	158	...	348	...	32	...
May .....	65	135	447	381	1,204	63	415
June .....	346	450	...	735	...	512	...
July .....	506	52	...	207	...	4	...
August .....	91	90	1,112	506	1,478	150	242
September .....	396	418	...	664	...	119	...
October .....	861	108	...	410	...	252	...
November .....	153	121	453	710	1,778	47	683
December .....	178	173	...	566	...	204	...
1977							
January .....	283	90	...	427	...	74	...
February .....	478	177	427	436	1,470	74	568
March .....	483	131	...	473	...	152	...
April .....	322	193	...	615	...	25	...
May .....	273	225	( <sup>1</sup> )	521	( <sup>1</sup> )	71	( <sup>1</sup> )
June .....	288	132	...	512	...	69	...
July .....	118	133	...	460	...	39	...
August .....	283	218	...	731	...	65	...
September .....	(NA)	(NA)	...	(NA)	...	(NA)	...
October .....							
November .....							
December .....							

NA=not available; p=preliminary; r=revised; e=estimated.

<sup>1</sup>See "New Features and Changes for This Issue," page 3.

# defense indicators

TABLE

2

## Advance Indicators of Defense Activity--Continued

Year and month	Defense Department military prime contract awards for work performed in the United States, DOD--Continued							
	632. Other hard goods		633. Soft goods		634. Construction		635. Services	
	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1975								
January .....	154	...	217	...	168	...	307	...
February .....	143	497	704	1,489	134	481	341	1,396
March .....	152	...	191	...	127	...	201	...
April .....	147	...	164	...	156	...	190	...
May .....	165	487	121	658	291	838	211	925
June .....	399	...	213	...	1,073	...	574	...
July .....	104	...	811	...	82	...	634	...
August .....	115	532	307	937	61	486	570	1,136
September .....	150	...	256	...	178	...	204	...
October .....	201	...	173	...	149	...	216	...
November .....	156	631	214	687	56	605	210	523
December .....	179	...	244	...	176	...	121	...
1976								
January .....	190	...	817	...	85	...	244	...
February .....	180	590	330	1,611	107	448	256	1,111
March .....	166	...	187	...	151	...	230	...
April .....	173	...	221	...	198	...	179	...
May .....	159	434	120	780	213	611	158	881
June .....	316	...	243	...	791	...	587	...
July .....	92	...	287	...	79	...	335	...
August .....	177	792	513	646	196	1,073	504	1,018
September .....	324	...	171	...	403	...	429	...
October .....	105	...	1,760	...	42	...	660	...
November .....	226	600	220	2,603	82	385	391	1,356
December .....	199	...	295	...	136	...	275	...
1977								
January .....	213	...	163	...	125	...	241	...
February .....	141	635	181	944	101	594	371	1,234
March .....	222	...	538	...	175	...	242	...
April .....	237	...	166	...	142	...	211	...
May .....	203	( <sup>1</sup> )	156	( <sup>1</sup> )	456	( <sup>1</sup> )	220	( <sup>1</sup> )
June .....	214	...	200	...	228	...	204	...
July .....	271	...	170	...	160	...	215	...
August .....	r 229	...	191	...	531	...	243	...
September .....	(NA)	...	(NA)	...	(NA)	...	(NA)	...
October .....	...	...	...	...	...	...	...	...
November .....	...	...	...	...	...	...	...	...
December .....	...	...	...	...	...	...	...	...

NA=not available; p=preliminary; r=revised; e=estimated.

<sup>1</sup>See "New Features and Changes for This Issue," page 3.

## Advance Indicators of Defense Activity--Continued

Year and month	Defense Department military prime contract awards for work performed in the United States, DOD--Continued					640. Defense Department military prime contract awards for work outside the United States, DOD	
	636. Contracts under \$10,000		637. Educational and nonprofit institutions		638. Civilian Health and Medical Program of the Uniformed Services (CHAMPUS), not seasonally adjusted	Not seasonally adjusted	Seasonally adjusted
	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted			
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1975							
January .....	372	...	51	...	5	114	...
February .....	345	1,144	61	205	0	93	388
March .....	419	...	53	...	2	96	...
April .....	418	...	42	...	0	73	...
May .....	367	1,141	35	201	0	86	813
June .....	635	...	76	...	0	558	...
July .....	263	...	184	...	5	244	...
August .....	345	1,218	92	253	1	149	317
September .....	409	...	80	...	0	124	...
October .....	374	...	67	...	0	252	...
November .....	412	1,273	50	192	0	164	941
December .....	408	...	82	...	0	255	...
1976							
January .....	327	...	39	...	2	286	...
February .....	416	1,156	48	163	2	95	681
March .....	405	...	44	...	2	139	...
April .....	300	...	68	...	1	147	...
May .....	430	1,100	50	254	0	93	609
June .....	625	...	73	...	1	306	...
July .....	253	...	74	...	0	208	...
August .....	351	1,458	55	142	0	132	424
September .....	615	...	74	...	1	347	...
October .....	201	...	203	...	0	575	...
November .....	303	892	127	415	0	107	962
December .....	358	...	78	...	0	175	...
1977							
January .....	365	...	69	...	0	362	...
February .....	344	1,279	61	285	0	74	878
March .....	528	...	91	...	0	191	...
April .....	420	...	65	...	0	101	...
May .....	451	( <sup>1</sup> )	41	( <sup>1</sup> )	0	103	( <sup>1</sup> )
June .....	384	...	36	...	0	157	...
July .....	449	...	47	...	0	190	...
August .....	464	...	50	...	0	174	...
September .....	(NA)	...	(NA)	...	(NA)	(NA)	...
October .....							
November .....							
December .....							

NA=not available; p=preliminary; r=revised; e=estimated.

<sup>1</sup>See "New Features and Changes for This Issue," page 3.

# defense indicators

TABLE

2

## Advance Indicators of Defense Activity--Continued

Year and month	Defense Department gross unpaid obligations outstanding, DOD						648. Manufacturers' new orders, defense products, Census		650. Manufacturers' new orders from the U.S. Government, aerospace industries, Census, seasonally adjusted*
	643. Total		644. Operations		645. Procurement				
	Not seasonally adjusted	Seasonally adjusted*	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data—6-month*	
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1975									
January .....	40,819	40,052	7,997	7,625	25,484	24,838	1,398	2,004	...
February .....	40,008	39,875	7,520	7,626	25,452	24,568	2,576	2,147	4,415
March .....	39,473	40,198	7,169	7,775	25,688	25,259	1,996	2,118	...
April .....	38,589	39,918	7,276	7,794	24,932	24,957	2,445	2,080	...
May .....	37,120	40,086	6,746	7,713	24,321	25,099	2,266	2,242	3,912
June .....	39,557	40,959	7,303	8,005	25,311	25,438	1,799	2,167	...
July .....	e41,470	e41,437	e8,733	e8,548	e25,167	e25,370	2,367	2,262	...
August .....	43,248	42,140	8,677	8,132	26,070	26,684	2,130	2,123	4,783
September .....	43,084	41,805	8,677	8,216	26,002	26,479	2,563	2,095	...
October .....	43,754	41,845	9,259	8,247	26,081	26,238	1,610	2,118	...
November .....	42,767	41,468	8,804	8,353	25,810	25,707	2,100	1,963	5,227
December .....	41,551	41,309	8,261	8,241	25,507	25,305	1,937	1,974	...
1976									
January .....	42,110	41,358	8,947	8,548	25,503	24,905	1,440	2,017	...
February .....	41,512	41,459	8,538	8,681	25,586	24,841	2,194	2,197	5,426
March .....	41,046	41,866	7,966	8,658	25,783	25,277	2,818	2,247	...
April .....	41,029	42,494	8,253	8,827	25,606	25,657	2,690	2,360	...
May .....	39,742	42,970	7,795	8,914	25,125	25,929	2,401	2,326	5,272
June .....	42,152	43,612	8,037	8,780	26,508	26,482	2,614	2,280	...
July .....	43,366	43,251	8,939	8,717	26,537	27,162	1,239	2,169	...
August .....	42,525	41,406	8,569	8,025	26,346	26,802	1,919	2,194	3,818
September .....	43,351	42,047	8,615	8,160	26,832	27,185	2,153	2,318	...
October .....	47,890	45,813	10,624	9,484	27,632	27,827	2,840	2,557	...
November .....	48,988	47,517	10,700	10,184	28,934	28,733	3,141	2,675	6,663
December .....	50,354	50,103	10,374	10,353	29,348	29,202	4,050	2,670	...
1977									
January .....	51,694	50,780	11,150	10,660	29,966	29,465	1,949	2,680	...
February .....	52,016	52,016	11,122	11,326	30,485	29,946	1,887	2,806	4,496
March .....	51,326	52,373	10,563	11,494	30,550	30,128	2,214	2,832	...
April .....	52,309	54,206	10,978	11,729	31,330	31,551	3,597	2,520	...
May .....	51,512	55,749	10,574	12,098	31,390	32,562	3,293	2,518	p6,420
June .....	51,549	53,308	10,320	11,254	31,449	31,449	2,182	2,536	...
July .....	50,898	50,695	10,676	10,395	30,853	31,259	1,932	r2,439	...
August .....	50,133	48,815	9,792	9,169	30,791	31,292	1,998	p2,559	(NA)
September .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	r1,630	(NA)	(NA)
October .....							p4,318		
November .....							(NA)		
December .....									

NA=not available; p=preliminary; r=revised; e=estimated. \*Indicates series shown in charts. (See pages 7 and 8.)



# Advance Indicators of Defense Activity--Continued

Year and month	653. Average weekly overtime hours, production workers, defense products industries, BLS			654. Accession rate, defense products industries, BLS			655. Layoff rate, defense products industries, BLS		
	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data--4-month*	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data--4-month*	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data--4-month*
	(Hours)	(Hours)	(Hours)	(Per 100 employees)	(Per 100 employees)	(Per 100 employees)	(Per 100 employees)	(Per 100 employees)	(Per 100 employees)
1975									
January .....	2.4	2.5	2.6	1.4	1.6	1.6	1.2	1.1	1.0
February .....	2.4	2.5	2.5	1.3	1.6	1.6	1.3	1.2	1.2
March .....	2.3	2.5	2.5	1.3	1.6	1.7	2.1	1.9	1.4
April .....	2.1	2.4	2.4	1.9	2.1	1.6	1.4	1.3	1.4
May .....	2.0	2.3	2.4	1.3	1.3	1.5	1.3	1.3	1.5
June .....	2.5	2.4	2.4	1.7	1.0	1.4	1.3	1.4	1.2
July .....	2.2	2.5	2.4	1.6	1.3	1.2	0.8	1.0	1.2
August .....	2.6	2.6	2.5	1.6	1.2	1.2	1.2	1.3	1.2
September .....	2.8	2.5	2.6	1.7	1.3	1.2	1.0	1.2	1.2
October .....	2.7	2.6	2.6	1.4	1.2	1.2	1.0	1.1	1.1
November .....	2.7	2.5	2.5	1.0	1.3	1.4	0.8	0.7	0.9
December .....	2.9	2.5	2.6	0.8	1.6	1.4	0.6	0.6	0.8
1976									
January .....	2.5	2.6	2.6	1.3	1.4	1.5	1.1	1.0	0.8
February .....	2.5	2.6	2.6	1.3	1.6	1.6	0.8	0.7	0.8
March .....	2.4	2.5	2.4	1.5	1.7	1.5	0.8	0.7	0.7
April .....	1.7	2.0	2.4	1.2	1.4	1.6	0.6	0.5	0.6
May .....	2.3	2.6	2.4	1.6	1.6	1.6	0.6	0.6	0.6
June .....	2.5	2.5	2.4	2.1	1.5	1.4	0.6	0.7	0.6
July .....	2.4	2.7	2.6	1.6	1.3	1.5	0.7	0.8	0.7
August .....	2.7	2.7	2.6	2.0	1.6	1.5	0.6	0.7	0.8
September .....	2.6	2.3	2.6	1.9	1.5	1.5	0.6	0.8	0.8
October .....	2.8	2.7	2.6	1.8	1.6	1.6	0.8	0.8	0.7
November .....	2.8	2.5	2.6	1.6	1.9	1.7	0.5	0.5	0.6
December .....	3.2	2.8	2.7	0.9	1.7	1.9	0.3	0.4	0.6
1977									
January .....	2.7	2.8	2.8	2.2	2.4	2.0	0.6	0.5	0.4
February .....	2.8	2.9	2.8	1.8	2.1	2.1	0.5	0.4	0.5
March .....	2.5	2.7	2.8	2.1	2.3	2.2	0.9	0.7	0.5
April .....	2.6	3.0	2.9	2.0	2.2	2.2	0.4	0.3	0.5
May .....	2.9	3.1	3.0	2.3	2.3	2.2	0.5	0.5	0.4
June .....	3.0	3.0	3.0	2.8	2.2	2.1	0.3	0.3	0.4
July .....	2.8	3.0	r2.9	2.0	1.7	2.0	0.6	0.7	0.5
August .....	r2.7	r2.6	p2.9	2.4	2.0	(NA)	0.4	0.5	(NA)
September .....	p3.0	p2.8	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
October .....	(NA)	(NA)							
November .....									
December .....									

NA=not available; p=preliminary; r=revised; e=estimated. \*Indicates series shown in charts. (See page 8.)

# defense indicators

TABLE

3

## Intermediate and Final Indicators of Defense Activity

Year and month	657. Output of defense and space equipment, FRB, seasonally adjusted*	659. Manufacturers' inventories, defense products, Census, seasonally adjusted*	661. Manufacturers' unfilled orders, defense products, Census, seasonally adjusted*	664. Manufacturers' unfilled orders from the U.S. Government, aerospace industries, Census, seasonally adjusted*	666. Defense Department progress payments outstanding, DOD, not seasonally adjusted*	670. Employment in defense products industries, total, BLS	
	(Index: 1967=100)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	Not seasonally adjusted	Seasonally adjusted*
1975							
January .....	82.1	5,487	27,221	...	...	1,178	1,175
February .....	79.9	5,565	27,815	...	...	1,141	1,141
March .....	79.7	5,639	27,823	20,907	9,609	1,137	1,142
April .....	80.2	5,750	28,238	...	...	1,121	1,128
May .....	80.9	5,890	28,604	...	...	1,131	1,140
June .....	81.6	6,051	28,459	21,230	10,464	1,123	1,127
July .....	81.0	6,207	28,920	...	...	1,110	1,117
August .....	80.6	6,252	29,007	...	...	1,100	1,108
September .....	81.2	6,399	29,706	20,906	11,008	1,104	1,100
October .....	78.5	6,456	29,237	...	...	1,097	1,090
November .....	77.3	6,549	29,264	...	...	1,089	1,077
December .....	77.7	6,568	29,210	21,776	11,257	1,088	1,075
1976							
January .....	80.5	6,488	28,449	...	...	1,084	1,081
February .....	80.1	6,523	28,438	...	...	1,075	1,076
March .....	79.5	6,634	29,069	22,598	9,848	1,071	1,077
April .....	78.4	6,720	29,550	...	...	1,066	1,072
May .....	78.1	6,824	29,727	...	...	1,061	1,070
June .....	77.5	6,774	30,294	22,883	12,041	1,060	1,064
July .....	77.5	6,846	29,422	...	...	1,043	1,050
August .....	78.5	6,804	29,153	...	...	1,053	1,060
September .....	77.6	6,798	29,188	22,020	11,881	1,062	1,059
October .....	78.0	6,847	29,800	...	...	1,062	1,056
November .....	77.6	6,847	30,698	...	...	1,066	1,054
December .....	77.2	6,577	32,231	21,666	8,465	1,070	1,060
1977							
January .....	78.0	6,609	31,536	...	...	1,067	1,062
February .....	78.5	6,625	30,809	...	...	1,067	1,069
March .....	78.5	6,517	30,411	22,962	8,521	1,061	1,067
April .....	79.9	6,602	31,512	...	...	1,071	1,077
May .....	80.0	6,637	32,226	...	...	1,071	1,079
June .....	80.3	6,874	31,857	p24,308	8,735	1,083	1,086
July .....	r80.4	6,936	31,212	...	...	1,084	1,092
August .....	r80.8	6,926	30,707	...	...	1,077	r1,084
September .....	r80.8	6,854	r29,768	(NA)	(NA)	p1,089	p1,084
October .....	p78.4	(NA)	p31,630	(NA)	(NA)	(NA)	(NA)
November .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
December .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

NA=not available; p=preliminary; r=revised; e=estimated. \*Indicates series shown in charts. (See pages 9 and 10.)

TABLE

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## Intermediate and Final Indicators of Defense Activity--Continued

Year and month	671. Employment in defense products industries, production workers, BLS		673. Index of aggregate weekly hours, defense products industries, BLS		675. Index of aggregate weekly payrolls, production workers, defense products industries, BLS	
	Not seasonally adjusted	Seasonally adjusted*	Not seasonally adjusted	Seasonally adjusted*	Not seasonally adjusted	Seasonally adjusted*
	(Thous.)	(Thous.)	(1967=100)	(1967=100)	(1967=100)	(1967=100)
1975						
January .....	618	615	69.2	69.2	102.8	102.6
February .....	589	589	67.0	67.0	98.6	98.4
March .....	585	588	66.8	67.0	99.1	99.4
April .....	570	574	66.1	66.8	97.6	99.5
May .....	581	588	66.5	66.8	100.2	101.3
June .....	573	577	66.4	66.6	101.2	102.3
July .....	564	570	65.0	66.1	97.9	101.7
August .....	555	563	64.9	65.6	98.3	101.0
September .....	558	556	65.5	65.1	102.0	101.2
October .....	554	549	64.9	64.5	101.5	100.4
November .....	549	540	64.6	63.5	101.8	98.7
December .....	549	538	65.0	63.8	104.9	99.8
1976						
January .....	545	542	64.1	64.1	101.3	101.1
February .....	540	540	63.5	63.5	100.7	100.4
March .....	537	539	63.3	63.6	100.8	101.1
April .....	533	537	62.0	62.7	96.1	99.3
May .....	530	536	62.6	63.0	99.2	100.0
June .....	529	533	62.6	62.8	99.4	100.2
July .....	510	516	61.2	62.2	96.0	99.8
August .....	520	528	62.0	62.7	99.2	101.8
September .....	529	528	62.4	62.0	101.9	101.1
October .....	529	525	62.4	62.0	104.0	102.6
November .....	532	523	63.5	62.5	106.5	103.4
December .....	533	524	64.1	62.7	109.2	103.8
1977						
January .....	533	529	63.0	62.8	106.4	105.5
February .....	531	531	63.6	63.7	108.5	108.4
March .....	525	528	63.3	63.6	107.4	107.8
April .....	533	538	63.5	64.5	109.2	113.1
May .....	534	539	63.8	64.1	110.3	111.2
June .....	541	543	64.6	64.6	112.7	113.5
July .....	539	546	64.0	65.1	110.9	115.3
August .....	r537	r545	64.0	r64.7	r111.5	r114.5
September .....	p548	p546	p64.9	p64.5	p117.1	p116.2
October .....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
November .....						
December .....						

NA=not available; p=preliminary; r=revised; e=estimated. \*Indicates series shown in charts. (See page 10.)

# defense indicators

TABLE

3

## Intermediate and Final Indicators of Defense Activity--Continued

Year and month	Defense Department personnel, DOD		Defense Department net outlays, DOD				
	677. Military, active duty, not seasonally adjusted*	678. Civilian, direct hire employment, not seasonally adjusted*	680. Total, military functions and military assistance			681. Operations	
			Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data--6-month*	Not seasonally adjusted	Seasonally adjusted
	(Thous.)	(Thous.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1975							
January .....	2,145	1,038	7,051	6,766	7,312	4,775	4,648
February .....	2,146	1,036	7,258	7,590	7,284	4,727	4,924
March .....	2,137	1,034	7,244	7,190	7,258	4,736	4,831
April .....	2,127	1,034	7,190	6,958	7,056	4,960	4,856
May .....	2,124	1,035	7,780	7,494	7,308	4,909	4,941
June .....	2,128	1,042	7,476	6,336	7,475	4,954	4,747
July .....	2,129	1,052	7,124	8,278	7,423	4,918	4,977
August .....	2,111	1,038	7,961	8,594	7,552	5,081	5,029
September .....	2,105	1,030	6,631	6,880	7,566	4,810	5,016
October .....	2,097	1,031	7,913	7,732	7,788	5,260	5,131
November .....	2,099	1,029	7,203	7,574	7,515	4,997	4,988
December .....	2,084	1,028	7,695	7,672	7,251	5,078	5,067
1976							
January .....	2,092	1,023	6,649	6,636	7,326	4,887	4,940
February .....	2,093	1,019	6,962	7,011	7,322	4,848	4,879
March .....	2,090	1,016	7,642	7,334	7,259	5,026	4,995
April .....	2,087	1,011	7,872	7,703	7,068	5,297	5,160
May .....	2,081	1,010	7,042	7,200	7,406	4,889	5,023
June .....	2,082	1,010	7,843	6,525	7,486	5,170	4,925
July .....	2,087	1,014	7,433	8,663	7,563	5,050	5,135
August .....	2,085	1,006	7,163	7,493	7,546	5,059	5,054
September .....	2,084	997	7,513	7,794	7,562	5,457	5,543
October .....	2,086	995	7,478	7,600	7,657	4,984	5,015
November .....	2,082	996	7,301	7,294	7,477	5,277	5,220
December .....	2,072	995	7,422	7,096	7,614	5,356	5,190
1977							
January .....	2,077	994	6,979	7,586	7,649	5,262	5,436
February .....	2,078	995	8,004	8,312	7,697	5,202	5,430
March .....	2,075	995	8,454	8,006	7,911	5,529	5,501
April .....	2,071	995	7,850	7,889	7,896	5,487	5,443
May .....	2,070	997	8,412	8,575	8,125	5,269	5,349
June .....	2,075	1,009	8,266	7,005	8,135	5,540	5,271
July .....	2,079	1,008	7,879	8,964	r8,290	5,389	5,449
August .....	2,073	998	8,244	8,370	p8,323	5,505	5,402
September .....	2,075	982	r8,795	r8,938	(NA)	r5,820	r5,879
October .....	p2,072	(NA)	p7,922	p8,092		p5,580	p5,753
November .....	(NA)		(NA)	(NA)		(NA)	(NA)
December .....							

NA=not available; p=preliminary; r=revised; e=estimated. \*Indicates series shown in charts. (See pages 10 and 11.)



## Intermediate and Final Indicators of Defense Activity--Continued

Year and month	Defense Department net outlays, DOD--Continued			683. Budget outlays for the national defense function, Treasury		685. Defense Department personnel compensation, DOD	
	682. Procurement			Seasonally adjusted*	Moving average of seasonally adjusted data--6-month*	Not seasonally adjusted	Seasonally adjusted*
	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data--6-month*				
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1975							
January .....	1,427	1,428	1,460	7,039	7,554	2,913	2,768
February .....	1,351	1,444	1,429	7,896	7,526	2,808	2,869
March .....	1,500	1,440	1,414	7,385	7,536	2,812	2,850
April .....	1,220	1,194	1,354	7,297	7,342	2,867	2,870
May .....	1,467	1,406	1,328	7,788	7,564	2,870	2,877
June .....	1,409	1,215	1,360	6,649	7,747	2,823	2,887
July .....	1,225	1,268	1,322	8,367	7,706	2,941	2,895
August .....	1,559	1,634	1,361	8,996	7,818	2,873	2,910
September .....	1,191	1,217	1,330	7,140	7,836	2,936	2,961
October .....	1,500	1,425	1,365	7,971	8,079	3,008	2,954
November .....	1,081	1,220	1,384	7,896	7,830	2,866	2,893
December .....	1,319	1,427	1,328	8,103	7,352	2,916	2,904
1976							
January .....	1,363	1,384	1,305	6,874	7,411	3,018	2,907
February .....	1,227	1,293	1,382	6,126	7,380	2,820	2,804
March .....	1,195	1,082	1,361	7,497	7,286	2,887	2,866
April .....	1,792	1,884	1,330	7,784	7,068	2,845	2,861
May .....	1,092	1,095	1,321	7,334	7,376	2,851	2,889
June .....	1,418	1,244	1,281	6,795	7,589	3,007	3,036
July .....	1,347	1,326	1,338	8,717	7,656	2,963	2,960
August .....	1,063	1,055	1,241	7,409	7,649	2,962	2,962
September .....	1,356	1,423	1,328	7,896	7,653	2,978	2,997
October .....	1,337	1,303	1,418	7,743	7,776	3,026	3,037
November .....	1,502	1,617	1,462	7,360	7,610	3,020	2,978
December .....	1,745	1,781	1,561	7,530	7,764	3,097	3,088
1977							
January .....	1,524	1,594	1,554	7,723	7,802	3,034	2,951
February .....	1,570	1,646	1,596	8,331	7,845	2,886	2,951
March .....	1,511	1,381	1,552	8,125	8,060	3,137	3,118
April .....	1,558	1,555	1,496	8,000	7,996	3,008	3,063
May .....	1,324	1,358	1,526	8,650	8,289	3,084	3,087
June .....	1,643	1,442	1,509	7,146	8,296	3,112	3,143
July .....	1,572	1,772	1,511	9,483	8,455	3,054	3,082
August .....	rl,521	1,547	pl,502	8,370	8,504	3,146	3,109
September .....	rl,372	rl,391	(NA)	9,079	(NA)	3,129	3,157
October .....	pl,512	pl,500		8,294		(NA)	(NA)
November .....	(NA)	(NA)		(NA)			
December .....							

NA=not available; p=preliminary; r=revised; e=estimated. \*Indicates series shown in charts. (See page 11.)

defense indicators

TABLE  
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Intermediate and Final Indicators of Defense Activity--Continued

Year and month	688. Manufacturers' shipments, defense products, Census		689. Manufacturers' shipments to the U.S. Government, aerospace industries, Census, seasonally adjusted*	691. Ratio, manufacturers' unfilled orders to shipments, defense products, Census		693. Ratio, manufacturers' inventories to shipments, defense products, Census	
	Seasonally adjusted*	Moving average of seasonally adjusted data--5-month*		Seasonally adjusted*	Moving average of seasonally adjusted data--5-month*	Seasonally adjusted*	Moving average of seasonally adjusted data--5-month*
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Ratio)	(Ratio)	(Ratio)	(Ratio)
1975							
January .....	1,923	1,902	...	14.2	14.6	2.9	2.9
February .....	1,982	1,950	4,105	14.0	14.3	2.8	2.9
March .....	1,989	1,965	...	14.0	14.2	2.8	2.9
April .....	2,030	1,969	...	13.9	14.3	2.8	2.9
May .....	1,901	1,954	4,104	15.0	14.5	3.1	3.0
June .....	1,943	1,965	...	14.6	14.6	3.1	3.1
July .....	1,906	1,931	...	15.2	15.0	3.3	3.2
August .....	2,043	1,967	4,847	14.2	14.8	3.1	3.2
September .....	1,864	1,993	...	15.9	14.7	3.4	3.2
October .....	2,079	2,010	...	14.1	14.6	3.1	3.2
November .....	2,073	2,042	4,283	14.1	14.3	3.2	3.2
December .....	1,991	2,110	...	14.7	13.7	3.3	3.1
1976							
January .....	2,201	2,132	...	12.9	13.6	2.9	3.1
February .....	2,206	2,159	4,564	12.9	13.4	3.0	3.0
March .....	2,187	2,206	...	13.3	13.2	3.0	3.0
April .....	2,210	2,175	...	13.4	13.6	3.0	3.1
May .....	2,224	2,156	5,056	13.4	13.8	3.1	3.1
June .....	2,047	2,156	...	14.8	13.8	3.3	3.1
July .....	2,111	2,137	...	13.9	13.8	3.2	3.2
August .....	2,188	2,138	4,528	13.3	13.8	3.1	3.2
September .....	2,117	2,178	...	13.8	13.6	3.2	3.1
October .....	2,228	2,258	...	13.4	13.4	3.1	3.0
November .....	2,244	2,350	4,970	13.7	13.1	3.1	2.9
December .....	2,515	2,450	...	12.8	12.7	2.6	2.8
1977							
January .....	2,647	2,526	...	11.9	12.4	2.5	2.6
February .....	2,615	2,577	5,277	11.8	12.1	2.5	2.5
March .....	2,611	2,589	...	11.6	12.1	2.5	2.5
April .....	2,496	2,570	...	12.6	12.2	2.6	2.6
May .....	2,578	2,563	p5,054	12.5	12.3	2.6	2.6
June .....	2,551	2,541	...	12.5	12.4	2.7	2.7
July .....	2,578	r2,555	...	12.1	r12.2	2.7	2.7
August .....	2,501	p2,531	(NA)	12.3	p12.3	2.8	(NA)
September .....	r2,568	(NA)	(NA)	r11.6	(NA)	2.7	(NA)
October .....	p2,457			p12.9		(NA)	
November .....	(NA)			(NA)			
December .....							

NA=not available; p=preliminary; r=revised; e=estimated. \*Indicates series shown in charts. (See page 12.)

TABLE

4

## Defense-Related Balance of Payments Components

Year and quarter	546. Transfers under U.S. military agency sales contracts (exports), BEA <sup>1</sup>		547. Direct defense expenditures (imports), BEA, not seasonally adjusted*	696. U.S. Government cash receipts associated with military sales contracts, BEA <sup>2</sup>	
	Not seasonally adjusted	Seasonally adjusted*		Not seasonally* adjusted	Seasonally adjusted*
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1973					
First quarter . . . . .	332	347	1,169	520	566
Second quarter . . . . .	504	455	1,231	544	552
Third quarter . . . . .	489	531	1,067	610	617
Fourth quarter . . . . .	1,017	1,009	1,162	616	555
1974					
First quarter . . . . .	644	638	1,153	497	546
Second quarter . . . . .	738	683	1,298	642	650
Third quarter . . . . .	720	781	1,265	995	990
Fourth quarter . . . . .	850	850	1,319	808	756
1975					
First quarter . . . . .	946	924	1,317	1,050	(NA)
Second quarter . . . . .	888	874	1,185	1,013	
Third quarter . . . . .	902	957	1,096	1,148	
Fourth quarter . . . . .	1,183	1,164	1,198	1,376	
1976					
First quarter . . . . .	1,132	1,095	1,160	2,246	
Second quarter . . . . .	1,193	1,189	1,228	1,858	
Third quarter . . . . .	1,403	1,472	1,237	2,041	
Fourth quarter . . . . .	1,486	1,457	1,222	2,068	
1977					
First quarter . . . . .	1,912	1,845	1,329	1,992	
Second quarter . . . . .	pl,854	pl,867	pl,403	pl,885	
Third quarter . . . . .					
Fourth quarter . . . . .					

NA=not available; p=preliminary; r=revised; e=estimated. \*Indicates series shown in charts. (See page 13.)

<sup>1</sup>Includes deliveries for which Israel has been released from its contractual liability to pay.<sup>2</sup>Excludes funds made available to release Israel from its contractual liability to pay for defense articles and services purchased through military sales contracts. Quarterly expenditures for such purpose under Public Law 93-199 and subsequent legislation amounted to (in millions): 1974, I1Q, \$623; I11Q, \$223; IVQ, \$91; 1975, IQ, \$187; I1Q, \$124; I11Q, \$83; IVQ, \$242; 1976, IQ, \$16; I1Q, \$100; I11Q, \$743; IVQ, \$5; 1977, IQ, \$138; I1Q, \$245.

## Appendix A. SEASONAL ADJUSTMENT FACTORS

Series title	1977											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>MONTHLY SERIES</b>												
Defense Department gross obligations incurred:												
617. Total <sup>1</sup>	99.9	88.2	94.7	94.6	78.0	135.2	112.5	108.5	99.8	105.3	92.4	90.0
619. Operations <sup>1</sup>	103.9	88.4	93.4	101.5	89.3	117.8	116.5	101.2	96.9	108.2	90.3	90.8
621. Procurement <sup>1</sup>	116.1	99.4	105.0	81.2	63.1	161.4	84.7	82.6	100.7	106.8	111.2	87.3
623. Gross obligations incurred outside the Federal Government for national defense <sup>1</sup>	101.3	84.9	99.6	94.1	82.8	126.3	117.7	110.0	96.5	95.2	103.3	90.4
625. Defense Department military prime contract awards for work performed in the United States <sup>1</sup>	96.6	82.4	89.3	73.3	70.6	177.9	115.5	107.1	101.4	111.0	86.7	87.4
Defense Department gross unpaid obligations outstanding:												
643. Total <sup>1</sup>	101.8	100.0	98.0	96.5	92.4	96.7	100.4	102.7	103.1	104.5	103.1	100.5
644. Operations <sup>1</sup>	104.6	98.2	91.9	93.6	87.4	91.7	102.7	106.8	105.6	111.9	104.9	100.2
645. Procurement <sup>1</sup>	101.7	101.8	101.4	99.3	96.4	100.0	98.7	98.4	99.6	100.8	101.3	100.5
648. Manufacturers' new orders, defense products <sup>3</sup>	108.0	93.7	97.3	82.5	65.3	117.1	186.8	94.1	102.5	106.9	83.8	101.0
653. Average weekly overtime hours, production workers, defense products industries <sup>4</sup>	-.1	-.1	-.2	-.4	-.2	.0	-.2	.1	.2	.2	.3	.4
654. Accession rate, defense products industries <sup>4</sup>	-.2	-.3	-.2	-.2	.0	.6	.3	.4	.4	.2	-.4	-.8
655. Layoff rate, defense products industries <sup>4</sup>	.1	.1	.2	.1	.0	.0	-.1	-.1	-.1	.0	.0	-.1
657. Output of defense and space equipment <sup>3</sup>	100.3	100.3	100.4	99.1	99.6	100.3	98.5	98.2	99.6	100.0	101.0	102.3
659. Manufacturers' inventories, defense products <sup>3</sup>	98.5	100.1	101.1	100.7	99.8	100.4	100.1	100.3	100.3	100.3	100.9	100.4
661. Manufacturers' unfilled orders, defense products <sup>3</sup>	101.2	100.9	100.6	99.1	96.2	97.4	101.4	101.2	100.9	101.5	100.0	99.9
Employment in defense products industries:												
670. Total <sup>1</sup>	100.5	99.8	99.5	99.4	99.3	99.7	99.2	99.3	100.4	100.6	101.0	100.9
671. Production workers <sup>1</sup>	100.8	99.9	99.5	99.2	99.0	99.6	98.7	98.5	100.4	100.9	101.6	101.7
673. Index of aggregate weekly hours, defense products industries <sup>1</sup>	100.3	99.9	99.6	98.5	99.6	99.9	98.3	99.0	100.6	100.6	101.5	102.1
675. Index of aggregate weekly payrolls, production workers, defense products industries <sup>1</sup>	100.9	100.1	99.7	96.6	99.2	99.3	96.2	97.4	100.7	101.4	103.0	105.2
Defense Department net outlays:												
680. Total, military functions and military assistance <sup>1</sup>	92.0	96.3	105.6	99.5	98.1	118.0	87.9	98.5	98.4	97.9	103.0	102.8
681. Operations <sup>1</sup>	96.8	95.8	100.5	100.8	98.5	105.1	98.9	101.9	99.0	97.0	103.3	99.5
682. Procurement <sup>1</sup>	95.6	95.4	109.4	100.2	97.5	113.9	88.7	98.3	98.6	100.8	93.2	107.5
683. Budget outlays for the national defense function <sup>1</sup>	91.7	97.6	105.5	99.7	98.9	117.6	84.4	100.5	98.9	97.5	103.1	103.1
685. Defense Department personnel compensation <sup>1</sup>	102.8	97.8	100.6	98.2	99.9	99.0	99.1	101.2	99.1	99.7	101.6	100.3
688. Manufacturers' shipments, defense products <sup>3</sup>	87.6	97.6	100.4	98.5	100.5	105.4	94.8	97.4	106.1	101.4	96.3	103.8
<b>QUARTERLY SERIES</b>												
	IQ			IIQ			IIIQ			IVQ		
200. Gross national product <sup>3</sup>	95.9			99.9			98.9			105.1		
264. Fed. Govt. purchases of goods and services, national defense <sup>3</sup>	98.3			102.8			97.7			101.4		
546. Transfers under U.S. military agency sales contracts—exports <sup>3</sup>	37			4			-69			29		
Defense Department military prime contract awards:												
626. Aircraft <sup>1</sup>	109.0			90.1			106.3			95.0		
627. Missile and space systems <sup>1</sup>	68.9			80.7			146.2			105.3		
629. Weapons and ammunition <sup>1</sup>	93.2			167.3			50.5			88.8		
630. Electronic and communications equipment <sup>1</sup>	90.9			121.2			93.8			94.8		
631. Combat vehicles <sup>1</sup>	52.8			164.5			108.3			73.6		
632. Other hard goods <sup>1</sup>	90.7			146.1			75.1			88.3		
633. Soft goods <sup>1</sup>	93.4			72.2			146.6			87.4		
634. Construction <sup>1</sup>	67.5			197.2			67.9			67.5		
635. Services <sup>1</sup>	69.2			103.6			130.0			97.8		
636. Under \$10,000 <sup>1</sup>	96.7			122.8			84.0			96.6		
637. Educational and nonprofit institutions <sup>1</sup>	77.6			76.0			149.3			98.2		
640. Outside U.S. <sup>1</sup>	71.4			92.3			147.6			89.1		
Aerospace industries:												
650. Manufacturers' new orders from the U.S. Government <sup>1</sup>	90.5			82.7			122.8			104.4		
664. Manufacturers' unfilled orders from the U.S. Government <sup>1</sup>	101.3			96.2			100.3			102.1		
669. Manufacturers' shipments to the U.S. Government <sup>1</sup>	93.8			102.6			101.0			102.6		

NOTE: The seasonal adjustment factors presented in this table were computed using the techniques described in the Bureau of the Census Technical Paper No. 15, *The X-11 Variant of the Census Method II Seasonal Adjustment Program*.

Monthly data for Defense Department military prime contract awards by commodity category (series 626 to 640) have not been adjusted for seasonal variation. The series on direct defense expenditures—imports (series 547), Defense Department progress payments outstanding (series 666), and Defense Department personnel (series 677 and 678) contain no measurable seasonal variation.

<sup>1</sup> Factors are products of seasonal and trading-day factors.

<sup>2</sup> Prior to 1972, data for gross unpaid obligations outstanding are not available for a number

of months but these gaps were filled with averages of preceding and following months for purposes of estimating seasonal variation.

<sup>3</sup> These series have been adjusted by the source agencies. The factors shown here are implicit seasonal factors for the calendar year 1976 and are derived by dividing the seasonally unadjusted data by the seasonally adjusted data.

<sup>4</sup> These series have been seasonally adjusted using the additive version of the seasonal adjustment program. Seasonally adjusted data are derived by subtracting the adjustment factor from the unadjusted data. Seasonally adjusted data for other series are derived by dividing the seasonal factors into the unadjusted data.

<sup>5</sup> This series is the total of component series which have been adjusted separately by the source agency. The factors shown here are implicit seasonal factors for the calendar year 1976 and are derived by subtracting the seasonally adjusted data from the seasonally unadjusted data.



# Appendix B. AVERAGE CHANGES AND RELATED MEASURES OF VARIABILITY

## Part 1. Monthly Series

Series title	Period covered	O	CI	T	C	T/C	MCD	Average duration of run (ADR)	
								CI	MCD
Defense Department gross obligations incurred:									
617. Total	Jan. '57-Jan. '76	18.28	6.98	6.89	0.72	9.53	6	1.53	2.30
619. Operations	July '59-Jan. '76	8.98	2.77	2.66	.65	4.09	4	1.69	3.00
621. Procurement	Jan. '57-Jan. '76	44.28	22.39	22.27	1.54	14.44	6	1.46	2.08
623. Gross obligations incurred outside the Federal Government for national defense	July '63-Sept. '75	14.17	7.92	7.82	.73	10.72	6	1.52	2.61
625. Defense Department military prime contract awards for work performed in the United States, total	Jan. '57-Jan. '76	32.78	15.55	15.41	1.35	11.42	6	1.42	2.05
Defense Department gross unpaid obligations outstanding:									
643. Total	Jan. '57-Jan. '76	2.13	1.32	.95	.88	1.08	2	2.65	3.98
644. Operations	Jan. '67-Jan. '76	5.59	2.68	2.37	1.13	2.10	3	1.96	5.05
645. Procurement	Jan. '67-Jan. '76	2.19	1.52	1.07	.94	1.14	2	2.08	4.12
Manufacturers' new orders:									
647. Defense products industries	Jan. '57-Mar. '72	(NA)	15.11	14.89	.97	15.32	6	1.58	2.33
648. Defense products	Feb. '68-Jan. '76	(NA)	21.50	21.43	1.47	14.59	6	1.56	1.80
*653. Average weekly overtime hours, production workers, defense products industries (hours)	Jan. '58-Jan. '76	.22	.11	.11	.03	3.14	4	2.50	3.70
*654. Accession rate, defense products industries (per 100 employees)	Jan. '58-Jan. '76	.38	.16	.15	.05	3.12	4	2.16	4.18
*655. Layoff rate, defense products industries (per 100 employees)	Jan. '58-Jan. '76	.17	.14	.13	.04	3.14	4	1.93	4.18
657. Output of defense and space equipment	Jan. '57-Jan. '76	(NA)	.96	.50	.75	.67	1	3.40	3.40
Manufacturers' inventories:									
658. Defense products industries	Jan. '57-Mar. '72	(NA)	1.04	.52	.85	.62	1	2.80	2.80
659. Defense products	Jan. '68-Jan. '76	(NA)	1.75	1.13	1.29	.88	1	3.10	3.10
Manufacturers' unfilled orders:									
660. Defense products industries	Jan. '57-Mar. '72	(NA)	1.23	.90	.83	1.09	2	2.76	3.42
661. Defense products	Jan. '68-Jan. '76	(NA)	1.51	1.18	.93	1.27	2	2.04	4.13
employment in defense products industries:									
670. Total	Jan. '58-Jan. '76	.76	.70	.29	.59	.50	1	4.91	4.91
671. Production workers	Jan. '58-Jan. '76	1.08	.93	.51	.70	.73	1	3.72	3.72
673. Index of aggregate weekly hours, defense products industries	Jan. '58-Jan. '76	.95	.76	.39	.60	.65	1	4.00	4.00
675. Index of aggregate weekly payrolls, production workers, defense products industries	Jan. '58-Jan. '76	1.72	1.14	.75	.78	.96	1	2.92	2.92
Defense Department personnel:									
677. Military, active duty (U)	Jan. '57-Jan. '76	.62	(NA)	.27	.55	.48	1	3.86	3.86
678. Civilian, direct hire employment (U)	Jan. '57-Jan. '76	.55	(NA)	.34	.42	.81	1	4.30	4.30
Defense Department net outlays:									
680. Total, military functions and military assistance	Jan. '57-Jan. '76	8.89	4.31	4.19	.77	5.42	6	1.70	3.10
681. Operations	July '59-Jan. '76	7.07	3.62	3.41	.73	4.69	5	1.58	2.34
682. Procurement	Jan. '57-Jan. '76	15.10	11.77	11.65	1.59	7.32	6	1.57	2.90
683. Budget outlays for the national defense function	Jan. '57-J. & N. '76	8.87	4.27	4.18	.73	5.73	6	1.58	2.97
685. Defense Department personnel compensation	Jan. '67-Jan. '76	2.70	1.33	1.13	.49	2.32	4	2.57	4.38
Manufacturers' shipments:									
687. Defense products industries	Jan. '57-Mar. '72	(NA)	2.67	2.49	.87	2.85	3	1.64	3.40
688. Defense products	Jan. '68-Jan. '76	(NA)	4.40	4.34	.98	4.41	5	1.57	2.71
Ratio, manufacturers' unfilled orders to shipments:									
690. Defense products industries	Jan. '57-Mar. '72	(NA)	2.95	2.71	.96	2.82	4	1.90	3.81
691. Defense products	Jan. '68-Jan. '76	(NA)	4.93	4.81	1.01	4.77	5	1.69	2.85
Ratio, manufacturers' inventories to shipments:									
692. Defense products industries	Jan. '57-Mar. '72	(NA)	2.84	2.90	.72	4.01	5	2.46	5.74
693. Defense products	Jan. '68-Jan. '76	(NA)	5.29	5.18	1.13	4.57	5	1.96	3.07

NA = not available.

\*Measures for these series are based on actual changes rather than percent changes (see definition below). <sup>(U)</sup> indicates measures are based on unadjusted data.

### BRIEF DEFINITIONS OF MEASURES SHOWN IN PART 1

The measures in this appendix provide a historical perspective for interpreting current changes in each series. They are derived using the Census X-11 seasonal adjustment program. Brief definitions of the measures are given below; more complete definitions appear in *Electronic Computers and Business Indicators* by Julius Shiskin, issued as Occasional Paper 57 by the National Bureau of Economic Research, 1957 (reprinted from *Journal of Business*, October 1957).

" $\bar{O}$ " is the average month-to-month percent change, without regard to sign, in the original unadjusted series. (See final paragraph below for exceptions to these definitions.)

" $\bar{CI}$ " is the same for the seasonally adjusted series.

" $\bar{C}$ " is the same for the short-term trend, which is a smooth, flexible moving average of the seasonally adjusted series.

" $\bar{T}$ " is the same for the irregular component, which is obtained by dividing the seasonally adjusted series by the short-term trend.

" $\bar{TC}$ " measures the relative smoothness (small values) or irregularity (large values) of the seasonally adjusted series. It is the ratio of the average monthly percent change (without regard to sign) in the irregular component to the average monthly percent change (without regard to sign) in the short-term trend.

"MCD" (months for cyclical dominance) estimates the number of months required for the short-term trend to dominate the irregular component. Average percent changes are computed for spans of from 1 to 12 months for both the irregular component and the short-term trend. MCD is the shortest span of months for which the average percent change (without regard to sign) in the short-term trend is greater than that in the irregular component. All MCD's greater than "5" are shown as "6".

## Appendix B. AVERAGE CHANGES AND RELATED MEASURES OF VARIABILITY—Continued

"Average Duration of Run" (ADR) is another measure of smoothness and is equal to the average number of consecutive monthly changes in the same direction in any series of observations. When there is no change between two observations, a change in the same direction as the preceding change is assumed. The ADR is shown for the seasonally adjusted series (CI) and the MCD curve, which is a moving average (with the number of terms equal to MCD) of the seasonally adjusted series. A comparison of these measures with the expected ADR of a random series indicates whether the changes approximate those of a random series. In a random series, the expected ADR is 1.5 and the actual values fall between 1.36 and 1.75 about 95 percent of the time. For a moving average of a random series, the expected ADR is 2.

Measures for series identified with an asterisk (\*) are computed by an additive method. This method is used for series with zero or negative data, series which could approach zero, and series expressed in percent. In this method, the measures are defined the same as above except for two differences: (1) the measures are based on actual month-to-month changes (rather than percent changes) and (2) the irregular component is obtained by subtracting the short-term trend from the seasonally adjusted series. The average changes shown above for the components of such a series are in the same unit of measure as the series itself. The unit is indicated in the series title.

### Part 2. Quarterly Series

Series title	Period covered	$\bar{O}$	$\bar{CI}$	$\bar{T}$	$\bar{C}$	$\bar{T/C}$	QCD	Average duration of run (ADR)	
								CI	QCD
200. Gross national product .....	IQ '57-IVQ '75 ....	(NA)	1.84	0.35	1.76	0.20	1	8.33	8.33
264. Federal Government purchases of goods and services, national defense .....	IQ '57-IVQ '75 ....	(NA)	1.95	.79	1.70	.46	1	3.26	3.26
*546. Transfers under U.S. military agency sales contracts—exports (mil. dol.) ..	IQ '60-IVQ '75 ....	79.21	65.13	48.28	34.19	1.41	2	1.70	2.30
*547. Direct defense expenditures—imports (mil. dol.) (U) .....	IQ '60-IVQ '75 ....	42.32	(NA)	36.13	24.65	1.47	2	1.66	2.82
*613. National defense purchases as a percent of GNP (percent) .....	IQ '57-IVQ '75 ....	(NA)	.16	.07	.15	.46	1	5.36	5.36
650. Manufacturers' new orders from the U.S. Government, aerospace industries .....	IQ '61-IVQ '75 ....	24.44	17.96	14.82	5.85	2.53	3	1.44	1.73
664. Manufacturers' unfilled orders from the U.S. Government, aerospace industries .....	IQ '61-IVQ '75 ....	4.55	3.91	2.44	2.68	.91	1	2.27	2.27
686. Defense Department progress payments outstanding (U) .....	IQ '57-IVQ '75 ....	4.80	(NA)	2.06	4.35	.47	1	2.78	2.78
689. Manufacturers' shipments to the U.S. Government, aerospace industries ..	IQ '61-IVQ '75 ....	7.04	4.27	3.43	2.11	1.62	2	1.84	2.76
*696. U.S. Government cash receipts associated with military sales contracts (million dollars) .....	IQ '60-IVQ '75 ....	107.60	83.62	61.48	45.74	1.34	2	1.57	2.82

NA = not available.

\*Measures for these series are based on actual changes rather than percent changes (see definition below). (U) indicates measures are based on unadjusted data.

### BRIEF DEFINITIONS OF MEASURES SHOWN IN PART 2

These measures are defined the same as those in part 1 except that they are based on quarter-to-quarter percent changes. For example, CI is the average quarter-to-quarter percent change (without regard to sign) in the seasonally adjusted series.

In deriving "QCD" (quarters for cyclical dominance), average percent changes are computed for spans of from one to four quarters for the irregular component and the short-term trend. QCD is the shortest span of quarters for

which the average percent change (without regard to sign) in the short-term trend is greater than that in the irregular component. All QCD's greater than "3" are shown as "4". The "Average Duration of Run" (ADR) measures are also expressed in quarters.

As in part 1, measures for series identified with an asterisk (\*) are computed by an additive method. This method is the same as that used for the monthly series except for the use of quarterly data rather than monthly.

## Appendix C. HISTORICAL DATA

This appendix provides historical data (back to 1945 if available) for selected Defense Indicators series. Data are shown for series which (a) have recently been added to the report, (b) have recently been revised, or (c) have not been shown here for a long time. By keeping these tables, the user can acquire a complete set of historical data. Each time a series is included in this appendix, it is footnoted to indicate the extent of any revisions since it was last shown. See the "Alphabetical Index—Series Finding Guide" for the latest issue in which historical data

were published for each series. Current figures are shown in the basic data tables each month and may be used to update these historical tables.

Official source agency annual figures are shown if available. Such figures may differ slightly from those computed from the monthly or quarterly data appearing in the tables. When both seasonally adjusted and unadjusted data are shown for a series, annual figures are included only for the unadjusted data. Quarterly and annual data are not included for moving averages.

Year	Monthly												Quarterly				Annual
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	I Q	II Q	III Q	IV Q	
617. DEFENSE DEPARTMENT GROSS OBLIGATIONS INCURRED, TOTAL, NOT SEASONALLY ADJUSTED (MILLIONS OF DOLLARS)																	
TOTAL FOR PERIOD																	
1949...	...	...	...	...	...	...	822	914	1,179	901	1,121	1,145	...	...	2,915	3,167	...
1950...	964	942	925	1,280	1,634	2,414	3,248	2,702	2,610	3,557	2,311	2,860	2,831	5,328	8,560	8,528	25,247
1951...	6,921	4,538	5,019	3,417	5,001	8,219	6,270	3,319	3,558	4,654	9,690	3,280	16,478	16,637	13,147	17,624	63,886
1952...	5,439	4,112	4,589	3,892	5,352	8,252	7,312	5,233	4,208	2,925	2,658	5,072	14,140	17,496	16,753	10,655	59,044
1953...	3,827	3,613	4,091	4,173	2,147	2,927	2,195	2,134	2,156	2,225	2,148	1,630	11,531	9,247	6,485	6,003	33,266
1954...	1,950	2,751	2,186	2,770	2,731	4,983	2,437	2,244	3,336	3,474	2,520	2,699	6,887	10,484	8,017	8,693	34,081
1955...	2,068	2,045	2,879	3,010	2,012	4,202	2,000	953	3,406	2,399	2,471	4,545	6,992	9,224	6,359	9,414	31,989
1956...	3,130	2,691	4,891	3,783	3,080	7,107	2,888	3,984	3,337	3,110	3,163	4,400	10,712	13,970	10,209	10,673	45,564
1957...	3,061	3,288	3,833	3,694	2,720	4,860	2,532	2,630	3,104	2,878	3,346	4,268	10,182	11,274	8,266	10,492	40,214
1958...	3,483	3,108	4,864	4,065	3,889	6,998	3,208	2,998	3,636	4,635	3,282	4,486	11,455	14,952	9,842	12,403	48,652
1959...	3,329	3,340	4,512	3,630	3,333	6,345	3,160	2,933	3,971	3,859	3,394	3,511	11,181	13,308	10,064	10,764	45,317
1960...	3,017	3,222	4,061	3,321	3,382	6,197	4,437	3,385	3,962	3,374	3,856	3,884	10,300	12,900	11,784	11,144	46,098
1961...	3,408	3,735	4,246	3,389	3,451	6,138	3,609	4,697	4,818	4,200	3,873	4,831	11,389	12,978	13,124	12,904	50,395
1962...	4,164	3,728	4,805	4,355	3,773	6,291	4,861	4,084	3,920	4,912	4,633	4,091	12,697	14,419	12,865	13,636	53,617
1963...	4,360	3,756	4,369	3,935	4,162	6,899	4,883	4,278	4,180	5,507	3,848	4,158	12,485	14,996	13,341	13,513	54,335
1964...	4,093	4,779	4,131	4,379	4,399	6,552	5,361	3,959	4,429	4,048	3,930	4,970	13,003	15,330	13,749	12,948	55,303
1965...	4,040	3,466	4,554	4,534	4,246	6,792	4,927	4,892	5,326	5,365	4,599	5,565	12,060	15,572	15,145	15,529	58,306
1966...	4,896	4,335	5,898	6,243	5,055	10,314	5,815	6,896	6,535	5,905	5,367	5,936	15,129	21,612	19,246	17,208	73,195
1967...	6,056	5,451	6,354	6,191	7,146	10,555	5,991	6,791	6,016	7,335	5,755	6,208	17,861	23,892	20,798	19,298	81,849
1968...	6,445	6,092	6,089	6,780	6,870	10,677	7,238	7,821	8,971	7,540	6,238	6,271	18,626	24,327	24,030	20,049	87,032
1969...	7,264	5,908	6,039	6,228	6,045	9,194	6,901	6,592	7,309	7,337	6,027	6,440	19,211	21,467	20,802	19,804	81,284
1970...	6,757	5,402	6,027	6,371	5,764	9,634	7,099	6,146	7,360	6,638	6,228	6,554	18,186	21,769	20,605	19,420	79,980
1971...	6,935	6,498	6,163	6,581	5,786	8,605	8,279	6,754	6,374	7,497	6,153	7,137	19,596	20,972	21,407	20,787	82,762
1972...	7,772	6,542	6,445	6,455	5,813	9,429	7,769	7,810	8,899	7,178	6,489	6,066	20,759	21,697	22,478	19,733	84,667
1973...	7,414	6,591	6,716	6,342	5,997	9,327	8,180	7,505	6,289	8,074	6,917	6,041	20,821	21,666	21,974	21,032	85,493
1974...	8,113	6,826	6,613	7,375	6,104	10,110	9,285	8,874	7,790	7,965	7,600	7,260	21,552	23,589	25,949	22,825	93,915
1975...	8,252	6,904	7,526	7,403	6,796	11,027	9,903	9,812	7,705	9,045	6,976	7,156	22,682	25,226	27,420	23,177	98,505
1976...	8,652	7,206	8,241	8,677	6,825	11,319	9,593	7,427	9,840	12,635	9,620	9,903	24,099	26,821	26,860	32,158	109,938
1977...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
617. DEFENSE DEPARTMENT GROSS OBLIGATIONS INCURRED, TOTAL, SEASONALLY ADJUSTED (MILLIONS OF DOLLARS)																	
TOTAL FOR PERIOD																	
1949...	...	...	...	...	...	...	619	995	1,286	989	1,268	1,435	...	...	2,900	3,692	...
1950...	977	1,043	960	1,438	1,621	1,609	2,479	2,905	2,834	3,935	2,410	3,593	2,980	4,668	8,218	9,938	...
1951...	7,048	4,987	5,158	3,698	5,011	5,450	4,933	3,573	3,851	5,114	11,241	4,136	17,193	14,167	12,357	20,491	...
1952...	5,601	4,484	4,544	3,980	5,011	5,362	6,191	5,782	4,520	3,190	3,091	6,208	14,629	14,843	16,493	12,489	...
1953...	4,003	3,997	3,889	4,059	2,272	1,841	2,040	2,409	2,289	2,459	2,545	1,850	11,889	8,172	6,738	6,854	...
1954...	2,095	3,074	1,966	2,539	3,024	3,070	2,563	2,597	3,493	3,890	2,944	2,788	7,135	8,633	8,653	9,622	...
1955...	2,295	2,342	2,506	2,704	2,271	2,533	2,334	1,133	3,552	2,703	2,857	4,320	7,143	7,508	7,019	9,880	...
1956...	3,585	3,125	4,131	3,424	3,528	4,225	3,592	4,882	3,502	3,479	3,566	3,986	10,841	11,177	11,976	11,031	...
1957...	3,522	3,877	3,192	3,521	3,094	2,862	3,177	3,259	3,267	3,216	3,718	3,790	10,591	9,477	9,703	10,724	...
1958...	3,834	3,664	4,252	3,985	4,480	4,271	3,931	3,634	3,719	4,910	3,800	3,898	11,750	12,736	11,284	12,608	...
1959...	3,792	3,887	3,929	3,735	3,842	3,870	3,552	3,658	3,968	4,118	3,709	3,208	11,608	11,447	11,178	11,035	...
1960...	3,447	3,554	3,592	3,483	3,901	3,882	4,973	3,897	3,869	3,620	4,042	3,689	10,593	11,266	12,739	11,351	...
1961...	3,857	4,332	3,752	3,840	3,803	3,853	3,924	5,335	4,785	4,303	4,096	4,780	11,941	11,496	14,044	13,179	...
1962...	4,473	4,349	4,616	4,764	4,199	4,099	4,925	4,312	4,135	4,787	4,866	4,249	13,438	13,062	13,372	13,902	...
1963...	4,731	4,485	4,374	4,137	4,390	4,856	4,639	4,556	4,265	5,442	4,164	4,277	13,590	13,385	13,460	13,883	...
1964...	4,242	5,783	4,245	4,563	4,813	4,349	5,010	4,274	4,308	3,984	4,487	5,088	14,270	13,725	13,592	13,559	...
1965...	4,421	4,276	4,599	4,575	4,720	4,446	4,888	5,017	5,110	5,345	5,225	5,599	13,296	13,741	15,015	16,169	...
1966...	5,489	5,328	6,178	6,392	5,442	6,821	5,963	6,687	5,958	6,037	6,136	6,328	16,995	18,655	18,608	18,501	...
1967...	6,589	6,659	6,495	6,746	7,439	6,838	6,427	6,625	7,267	7,258	6,667	6,815	19,743	21,023	20,319	20,740	...
1968...	6,688	7,212	6,641	7,013	7,067	7,481	7,317	7,638	8,244	7,256	7,183	7,011	20,541	21,561	23,199	21,450	...
1969...	7,378	7,097	6,860	6,556	6,632	6,324	6,887	6,680	6,490	6,830	7,150	6,838	21,335	19,512	20,057	20,818	...
1970...	6,906	6,489	6,766	6,683	6,556	6,491	6,793	6,357	5,583	6,368	7,033	6,942	20,161	19,730	19,733	20,343	...
1971...	6,796	7,261	6,753	6,752	6,990	6,389	7,462	6,763	6,249	7,333	6,683	7,432	20,810	20,311	20,474	21,448	...
1972...	7,604	6,951	6,898	7,267	6,825	6,866	7,173	7,613	6,824	7,015	7,109	6,708	21,453	20,958	21,610	20,832	...
1973...	6,927	7,283	7,362	6,865	7,275	6,992	7,312	6,932	6,790	7,671	7,315	6,850	21,472	21,132	21,034	21,836	...
1974...	7,527	7,398	7,485	7,762	7,187	8,166	7,903	8,279	8,179	7,681	8,211	8,116	22,410	23,115	24,441	24,008	...
1975...	7,341	7,467	8,677	7,933	8,199	8,583	8,614	9,406	7,907	8,387	8,069	7,925	23,485	24,715	25,927	24,381	...
1976...	8,132	7,962	8,842	9,134	8,772	8,491	8,116	6,803	10,424	12,255	10,355	11,003	24,936	26,397	25,373	33,613	...
1977...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

NOTE: These series contain no revisions but are reprinted for the convenience of the user.

(NOVEMBER 1977)

NO 1977 UMI

NOTE: These series contain no revisions but are reprinted for the convenience of the user. (NOVEMBER 1977)



# Appendix C. HISTORICAL DATA—Continued

Year	Monthly												Quarterly				Annual
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	I Q	II Q	III Q	IV Q	
621. DEFENSE DEPARTMENT GROSS OBLIGATIONS INCURRED, PROCUREMENT, NOT SEASONALLY ADJUSTED <sup>1</sup>																	
(MILLIONS OF DOLLARS)																	
													TOTAL FOR PERIOD				
1953...	...	...	...	...	...	...	290	96	187	140	256	-244	...	...	573	152	...
1954...	-77	632	272	228	583	1,960	560	291	1,335	1,467	555	2,171	...	...	2,771	2,186	4,933
1955...	98	425	861	716	254	917	100	-1,025	1,458	1,465	348	2,348	1,384	1,887	533	2,861	9,977
1956...	909	571	2,642	826	836	3,713	687	1,840	1,205	846	1,032	2,141	4,122	5,375	3,732	4,019	17,248
1957...	815	1,073	1,693	1,001	582	1,575	289	633	1,230	636	1,234	2,023	3,581	3,158	2,152	3,895	12,786
1958...	1,180	992	2,512	1,213	1,495	3,388	612	693	1,110	1,895	1,097	2,024	4,684	6,096	2,415	5,016	18,211
1959...	976	1,160	2,058	1,065	1,029	3,101	560	685	1,319	1,268	1,007	1,079	4,194	5,195	2,564	3,354	15,307
1960...	696	996	1,513	758	1,034	2,789	1,413	975	1,216	841	1,408	1,296	3,205	4,581	3,604	3,545	14,935
1961...	978	1,387	1,713	846	848	2,729	949	1,772	1,877	1,208	1,236	1,870	4,078	4,423	4,498	4,314	17,313
1962...	1,438	1,100	1,688	1,485	819	2,570	1,468	1,081	1,007	1,610	1,654	1,200	4,226	4,874	3,556	4,495	17,151
1963...	1,332	1,125	1,352	1,035	1,103	2,683	1,104	1,338	1,183	1,950	1,044	1,214	3,809	4,821	3,625	4,208	16,463
1964...	919	1,771	1,056	1,208	1,585	2,132	1,515	639	1,131	870	1,045	1,745	3,746	4,925	3,285	3,650	15,616
1965...	934	508	1,364	1,369	1,315	2,256	986	1,516	1,614	1,733	1,168	1,867	2,786	4,940	4,116	4,768	16,610
1966...	1,259	1,184	1,931	2,198	1,520	4,820	1,287	2,226	1,845	1,815	1,520	1,941	4,374	8,538	5,368	5,276	23,556
1967...	1,738	1,451	1,924	1,801	2,485	4,663	1,045	1,894	3,213	2,699	1,717	1,876	5,113	8,949	6,154	6,292	26,508
1968...	1,784	1,865	2,003	2,239	2,308	4,237	1,459	2,751	3,535	2,275	1,923	1,879	5,652	8,784	7,745	6,077	28,258
1969...	1,781	1,567	1,480	1,428	1,264	3,087	851	1,309	2,570	2,078	1,516	2,008	4,828	5,779	4,730	5,602	20,939
1970...	1,561	1,165	1,427	1,331	1,232	3,465	1,071	1,163	2,332	1,639	1,710	2,000	4,153	6,028	4,566	5,349	20,096
1971...	1,946	1,672	1,245	1,425	1,103	2,504	1,518	1,361	1,665	2,183	1,544	2,209	4,863	5,032	4,544	5,936	20,375
1972...	2,534	1,667	1,470	1,278	993	2,975	1,310	1,767	1,582	1,757	1,556	1,456	5,671	5,246	4,659	4,769	18,025
1973...	1,815	1,785	1,435	1,028	1,171	2,871	1,019	1,393	1,168	2,105	1,714	1,321	5,035	5,070	3,580	5,140	18,825
1974...	2,337	1,677	1,381	1,546	894	2,465	1,332	1,416	1,919	1,709	2,281	1,646	5,395	4,905	4,667	5,636	20,603
1975...	1,895	1,569	1,994	1,147	1,147	2,693	1,510	2,508	1,506	1,733	1,320	1,428	4,558	4,987	5,524	4,481	20,450
1976...	1,697	1,664	2,093	1,688	1,155	3,218	1,612	1,458	2,152	2,312	2,497	2,855	5,454	6,361	5,422	7,664	24,601
1977...																	
621. DEFENSE DEPARTMENT GROSS OBLIGATIONS INCURRED, PROCUREMENT, SEASONALLY ADJUSTED <sup>2</sup>																	
(MILLIONS OF DOLLARS)																	
													TOTAL FOR PERIOD				
1953...	...	...	...	...	...	...	470	172	200	206	304	-518	...	...	842	-8	...
1954...	34	740	14	386	758	1,067	1,064	490	1,370	1,651	680	1,560	788	2,211	2,924	3,891	...
1955...	320	625	514	861	405	305	474	-872	1,489	324	466	1,531	1,459	1,571	1,091	2,321	...
1956...	1,278	781	1,739	1,118	1,158	1,767	1,735	2,424	1,250	1,051	1,196	1,291	3,790	4,043	5,409	3,538	...
1957...	1,846	1,407	1,117	1,347	802	744	707	827	1,265	786	1,418	1,327	3,664	2,893	2,799	3,531	...
1958...	1,637	1,232	1,669	1,619	2,042	1,580	1,404	891	1,121	2,291	1,238	1,545	4,538	5,241	3,416	5,074	...
1959...	1,330	1,362	1,371	1,398	1,381	1,425	1,202	870	1,319	1,517	1,124	929	4,063	4,204	3,391	3,570	...
1960...	937	1,104	1,020	983	1,488	1,397	2,204	1,256	1,256	945	1,468	1,096	3,061	3,868	4,716	3,509	...
1961...	1,277	1,555	1,230	1,047	1,220	1,390	1,181	2,278	1,933	1,354	1,286	1,773	4,062	3,657	5,392	4,413	...
1962...	1,758	1,228	1,410	1,791	1,039	1,311	1,657	1,395	1,040	1,675	1,787	1,205	4,396	4,141	4,092	4,667	...
1963...	1,586	1,206	1,366	1,215	1,358	1,363	1,132	1,700	1,207	2,010	1,094	1,273	4,158	3,936	4,039	4,377	...
1964...	1,075	1,843	1,237	1,389	1,910	1,079	1,494	803	1,141	889	1,089	1,747	4,155	4,378	3,438	3,725	...
1965...	1,605	700	1,355	1,444	1,402	1,254	1,128	1,741	1,732	1,733	1,212	1,882	3,060	4,100	4,601	4,827	...
1966...	1,369	1,736	1,904	2,109	1,620	2,415	1,753	2,251	1,866	1,931	1,723	1,937	5,279	6,144	5,870	5,591	...
1967...	2,296	2,140	1,903	1,754	2,480	2,290	1,633	1,925	2,938	2,735	2,173	1,846	6,339	6,524	6,516	6,754	...
1968...	2,360	2,865	1,985	2,161	2,299	2,077	2,323	2,804	3,234	2,298	2,520	1,959	7,210	6,537	8,361	6,777	...
1969...	2,088	2,075	1,701	1,638	1,528	1,550	1,447	1,476	1,752	1,867	1,820	2,103	5,864	4,716	4,675	5,790	...
1970...	1,807	1,523	1,669	1,559	1,486	1,771	1,825	1,332	1,542	1,459	1,851	1,803	4,999	4,816	4,699	5,113	...
1971...	1,871	1,839	1,486	1,780	1,554	1,389	2,314	1,662	1,413	1,915	1,624	1,958	5,196	4,731	5,389	5,497	...
1972...	2,142	1,723	1,715	1,642	1,493	1,725	1,854	2,018	1,504	1,970	1,554	1,437	5,580	4,860	4,660	5,376	...
1973...	1,489	1,809	1,585	1,324	1,824	1,712	1,338	1,572	1,164	1,911	1,646	1,383	4,883	4,860	4,074	4,940	...
1974...	1,937	1,675	1,425	1,991	1,398	1,494	1,667	1,614	1,953	1,553	2,136	1,807	5,037	4,883	5,234	5,496	...
1975...	1,603	1,575	1,960	1,448	1,813	1,644	1,827	2,940	1,515	1,605	2,106	1,612	5,138	4,905	6,282	4,423	...
1976...	1,453	1,672	2,014	2,096	1,828	1,983	2,157	1,747	2,147	2,157	2,258	3,270	5,139	5,907	6,051	7,685	...
1977...																	
621. DEFENSE DEPARTMENT GROSS OBLIGATIONS INCURRED, PROCUREMENT, 6-MONTH MOVING AVERAGE OF SEASONALLY ADJUSTED DATA <sup>2</sup> (MILLIONS OF DOLLARS)																	
1953...	...	...	...	...	...	...	...	...	...	139	66	161					
1954...	130	160	236	500	672	630	856	1,067	1,054	1,136	1,012	1,034					
1955...	892	760	714	505	531	281	444	354	364	569	703	978					
1956...	1,020	1,152	1,268	1,307	1,383	1,657	1,575	1,564	1,571	1,491	1,392	1,223					
1957...	1,200	1,250	1,184	1,093	1,021	924	949	855	958	1,055	1,210	1,278					
1958...	1,345	1,484	1,588	1,630	1,591	1,534	1,443	1,555	1,421	1,415	1,403	1,481					
1959...	1,523	1,374	1,398	1,378	1,357	1,275	1,266	1,286	1,243	1,160	1,116	1,155					
1960...	1,105	1,016	1,077	1,155	1,366	1,391	1,431	1,424	1,421	1,371	1,216	1,266					
1961...	1,262	1,279	1,238	1,287	1,271	1,391	1,508	1,559	1,570	1,634	1,730	1,555					
1962...	1,468	1,541	1,500	1,423	1,406	1,434	1,372	1,353	1,478	1,460	1,448	1,417					
1963...	1,471	1,394	1,323	1,349	1,273	1,356	1,329	1,462	1,418	1,403	1,393	1,417					
1964...	1,422	1,319	1,455	1,422	1,492	1,319	1,303	1,219	1,083	1,194	1,112	1,095					
1965...	1,131	1,223	1,276	1,193	1,214	1,387	1,450	1,498	1,467	1,571	1,657	1,656					
1966...	1,684	1,747	1,815	1,904	1,923	2,009	2,002	1,973	1,990	1,910	2,001	1,982					
1967...	1,988	1,958	2,085	2,144	2,033	1,998	2,173	2,337	2,286	2,212	2,333	2,490					
1968...	2,327	2,232	2,253	2,295	2,285	2,275	2,483	2,275	2,483	2,406	2,443	2,523					
1969...	2,107	1,997	1,832	1,764	1,657	1,557	1,565	1,603	1,652	1,744	1,804	1,812					
1970...	1,798	1,747	1,691	1,636	1,639	1,607	1,586	1,569	1,630	1,635	1,643	1,728					
1971...	1,718	1,773	1,724	1,654	1,728	1,699	1,687	1,708	1,719	1,814	1,786	1,796					
1972...	1,846	1,801	1,778	1,740	1,778	1,692	1,741	1,692	1,704	1,851	1,856	1,861					
197																	

# Appendix C. HISTORICAL DATA—Continued

Year	Monthly												Quarterly				Annual
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	I Q	II Q	III Q	IV Q	
623. GROSS OBLIGATIONS INCURRED OUTSIDE THE FEDERAL GOVERNMENT FOR NATIONAL DEFENSE, SEASONALLY ADJUSTED (MILLIONS OF DOLLARS)																	
													TOTAL FOR PERIOD				
1963...	...	...	...	...	...	...	3,801	4,458	4,703	4,809	3,975	4,205	...	...	12,962	12,989	...
1964...	4,616	6,094	4,680	4,226	4,606	4,585	4,493	4,505	4,523	4,379	4,612	4,383	15,390	13,417	13,521	13,374	55,702
1965...	4,420	4,114	4,205	4,613	4,741	4,429	5,156	4,985	4,978	5,275	5,259	5,938	12,964	13,783	15,119	16,472	58,338
1966...	5,568	5,914	6,260	5,903	5,989	6,625	6,269	6,603	6,248	6,303	6,484	6,313	17,742	18,517	19,120	19,100	74,479
1967...	6,856	6,459	6,519	6,738	7,318	6,742	6,733	6,546	7,259	7,134	6,439	6,835	19,834	20,798	20,538	20,408	81,578
1968...	6,659	7,187	6,905	7,009	6,857	7,385	7,448	7,523	8,959	7,807	7,305	7,086	20,751	21,251	23,930	22,198	88,130
1969...	7,187	7,294	6,781	6,686	6,862	6,790	7,203	7,138	6,837	6,790	7,287	6,807	21,262	20,338	21,178	20,884	83,662
1970...	7,287	6,790	7,213	6,893	6,761	6,569	6,774	6,792	6,203	5,717	8,051	7,153	21,290	20,323	19,769	20,921	82,303
1971...	6,331	7,029	6,788	7,038	6,839	6,699	7,071	6,907	6,734	7,130	7,331	7,213	20,148	20,576	20,712	21,674	83,110
1972...	6,256	7,168	7,294	7,401	7,196	7,037	7,335	7,867	6,707	6,923	6,416	6,977	22,718	21,634	21,909	22,316	88,577
1973...	6,496	6,706	7,421	6,986	7,098	6,877	7,773	7,441	7,588	8,935	7,417	6,396	22,623	20,961	22,802	22,748	89,134
1974...	8,264	7,874	7,819	8,270	7,647	8,534	8,526	9,202	9,326	8,503	8,963	8,138	23,957	24,451	27,054	25,605	101,067
1975...	8,069	8,271	8,590	5,335	12,426	10,487	9,397	9,321	8,092	7,830	9,697	6,537	24,930	28,248	26,810	24,064	104,052
1976...	9,476	9,168	10,511	10,022	9,137	9,383	8,238	7,307	10,597	12,679	9,698	11,684	29,155	28,542	26,142	34,061	117,900
1977...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
623. GROSS OBLIGATIONS INCURRED OUTSIDE THE FEDERAL GOVERNMENT FOR NATIONAL DEFENSE, 6-MONTH MOVING AVERAGE OF SEASONALLY ADJUSTED DATA (MILLIONS OF DOLLARS)																	
													TOTAL FOR PERIOD				
1963...	...	...	...	...	...	...	...	...	...	4,325	4,461	4,734	...	...	...	...	...
1964...	4,730	4,633	4,738	4,801	4,781	4,516	4,480	4,515	4,516	4,483	4,470	4,405	15,390	13,417	13,521	13,374	55,702
1965...	4,390	4,429	4,450	4,458	4,581	4,726	4,817	4,927	5,014	5,265	5,334	5,489	12,964	13,783	15,119	16,472	58,338
1966...	5,702	5,807	5,929	6,043	6,160	6,275	6,273	6,340	6,422	6,370	6,468	6,444	17,742	18,517	19,120	19,100	74,479
1967...	6,489	6,562	6,701	6,772	6,752	6,766	6,809	6,955	6,809	6,824	6,812	6,919	19,834	20,798	20,538	20,408	81,578
1968...	6,860	6,839	6,909	7,000	7,132	7,188	7,530	7,663	7,738	7,688	7,645	7,606	20,751	21,251	23,930	22,198	88,130
1969...	7,243	7,057	6,963	6,933	6,936	6,910	6,919	6,937	7,008	7,010	7,024	7,066	21,262	20,338	21,178	20,884	83,662
1970...	7,029	7,063	6,975	6,936	6,850	6,850	6,682	6,469	6,684	6,762	6,708	6,747	21,290	20,323	19,769	20,921	82,303
1971...	6,845	7,065	6,863	6,787	6,911	6,890	6,881	6,897	6,979	7,064	7,262	7,306	20,148	20,576	20,712	21,674	83,110
1972...	7,399	7,444	7,421	7,392	7,239	7,355	7,257	7,177	7,381	7,371	7,231	7,371	22,718	21,634	21,909	22,316	88,577
1973...	7,490	7,501	7,281	7,264	7,477	7,266	7,294	7,619	7,672	7,592	7,674	7,746	22,623	20,961	23,802	22,748	89,134
1974...	7,784	7,673	7,712	8,068	8,112	8,333	8,584	8,623	8,842	8,776	8,700	8,545	23,957	24,451	27,054	25,605	101,067
1975...	8,422	7,894	8,472	8,863	9,084	9,259	9,176	9,592	9,137	8,479	8,492	8,467	24,930	28,248	26,810	24,064	104,052
1976...	8,870	9,235	9,142	9,616	9,410	9,100	9,114	9,557	9,650	10,034	10,290	10,958	...	...	...	...	...
1977...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
683. BUDGET OUTLAYS FOR THE NATIONAL DEFENSE FUNCTION, SEASONALLY ADJUSTED (MILLIONS OF DOLLARS)																	
													TOTAL FOR PERIOD				
1953...	3,715	3,734	3,820	3,842	3,921	3,418	3,909	4,042	4,071	4,037	3,995	3,909	11,269	11,181	12,022	11,941	46,413
1954...	3,917	3,798	3,732	3,612	3,572	3,529	3,353	3,351	3,249	3,327	3,439	3,470	11,447	11,113	9,953	10,236	42,749
1955...	3,446	3,234	3,603	3,433	3,445	3,482	3,472	3,444	3,483	3,348	3,215	3,279	10,283	10,360	10,399	9,842	40,884
1956...	3,168	3,271	3,222	3,349	3,385	3,895	3,250	3,418	3,393	3,573	3,635	3,597	9,661	10,629	10,061	10,805	41,156
1957...	3,761	3,782	3,797	3,882	3,712	3,645	3,727	3,812	3,727	3,407	3,624	3,579	11,340	11,239	11,266	10,610	44,455
1958...	3,707	3,724	3,722	3,620	3,694	3,871	3,885	3,686	3,908	3,986	3,927	3,952	11,153	11,185	11,481	11,865	45,684
1959...	3,817	3,808	3,838	3,849	3,836	3,874	3,914	3,862	3,835	3,863	3,860	3,860	11,463	11,559	11,611	11,624	46,257
1960...	3,807	3,769	3,733	3,728	3,744	3,377	3,888	3,906	3,926	3,846	3,909	3,984	11,309	10,909	11,720	11,739	45,677
1961...	3,893	4,013	3,994	3,975	4,051	3,938	3,930	3,949	4,020	4,080	4,238	4,235	11,900	11,964	11,899	12,553	48,316
1962...	4,380	4,353	4,355	4,444	4,577	4,511	4,397	4,363	4,396	4,479	4,511	4,387	13,088	13,532	13,156	13,377	53,153
1963...	4,515	4,366	4,456	4,451	4,306	4,311	4,425	4,501	4,457	4,506	4,215	4,437	13,337	13,068	13,483	13,150	53,046
1964...	4,291	4,591	4,185	4,444	4,850	4,985	3,798	4,027	4,208	4,145	4,252	4,200	13,067	14,279	12,033	12,597	51,976
1965...	4,208	4,104	4,132	4,203	4,580	4,258	4,229	4,492	4,465	4,594	4,642	4,804	12,444	13,041	13,186	14,040	52,711
1966...	4,096	4,807	5,057	5,000	5,076	5,424	5,671	5,506	5,805	5,728	5,681	5,710	14,760	15,500	16,982	17,119	64,361
1967...	6,372	6,181	6,224	6,589	6,159	5,211	7,508	6,615	6,626	6,649	6,611	6,096	18,777	17,959	20,749	19,356	76,841
1968...	7,068	6,539	6,157	6,816	7,095	6,863	5,857	6,930	6,811	6,719	7,075	7,133	19,784	20,774	19,598	20,927	81,083
1969...	6,701	6,954	6,803	6,684	6,838	6,833	6,904	6,992	6,674	6,931	7,066	6,818	20,458	20,355	20,570	20,815	82,198
1970...	6,609	6,648	6,452	6,491	6,705	5,796	7,410	6,612	6,475	6,310	6,306	6,535	19,709	18,992	20,497	19,151	78,349
1971...	6,436	6,219	6,258	5,990	6,190	6,784	5,777	5,923	6,077	6,361	6,278	6,441	18,913	18,964	17,777	19,080	74,734
1972...	6,449	6,442	6,582	6,912	6,684	6,574	5,976	6,136	5,667	6,472	6,499	6,320	19,473	19,170	17,779	19,291	77,713
1973...	6,534	6,563	6,561	6,500	6,164	6,666	5,849	6,776	6,754	6,542	6,735	6,416	19,658	19,330	19,379	19,693	78,060
1974...	6,569	6,835	6,579	6,567	6,874	6,973	6,783	7,212	7,362	7,467	7,727	7,809	19,983	20,414	21,357	23,003	84,757
1975...	7,039	7,896	7,385	7,297	7,788	6,649	8,367	8,996	7,140	7,971	7,896	8,103	22,320	21,734	24,503	23,970	92,527
1976...	6,874	6,126	7,497	7,784	7,334	6,795	8,717	7,409	7,896	7,743	7,360	7,530	20,497	21,913	24,022	22,633	89,065
1977...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
683. BUDGET OUTLAYS FOR THE NATIONAL DEFENSE FUNCTION, 6-MONTH MOVING AVERAGE OF SEASONALLY ADJUSTED DATA (MILLIONS OF DOLLARS)																	
													TOTAL FOR PERIOD				
1953...	...	...	...	3,742	3,774	3,825	3,867	3,900	3,912	3,994	3,995	3,955	...	...	...	...	...
1954...	3,898	3,827	3,757	3,760	3,666	3,592	3,511	3,464	3,441	3,365	3,380	3,361	11,269	11,181	12,022	11,941	46,413
1955...	3,420	3,438	3,439	3,441	3,445	3,480	3,460	3,446	3,407	3,374	3,323	3,294	10,447	11,113	9,953	10,236	42,749
1956...	3,251	3,251	3,279	3,382	3,395	3,420	3,448	3,486	3,527	3,478	3,563	3,624	9,661	10,629	10,061	10,805	41,156
1957...	3,691	3,742	3,755	3,763	3,758	3,763	3,751	3,672	3,657	3,646	3,643	3,628	11,340	11,239	11,266	10,610	44,455
1958...	3,627	3,663	3,674	3,723	3,753	3,747	3,778	3,789	3,878	3,891	3,880	3,800	11,153	11,185	11,481	11,865	45,684
1959...	3,569	3,665	3,682	3,687	3,683	3,853	3,862	3,858	3,853	3,865	3,860	3,860	11,463	11,559	11,611	11,624	46,257
1960...	3,822	3,800	3,780	3,703	3,717	3,739	3,772	3,791	3,819	3,910	3,911	3,929	11,309	10,909			





# ALPHABETICAL INDEX—SERIES FINDING GUIDE

Series title	Series number	Current issue (page numbers)		Historical data (issue date)	Series descriptions (issue date)	Series title	Series number	Current issue (page numbers)		Historical data (issue date)	Series descriptions (issue date)
		Charts	Tables					Charts	Tables		
Accession rate, defense products industries	654	8	21	10/77	4/73	Hours, defense products industries	673	10	23	10/77	4/73
Aerospace industries						Inventories, manufacturers'					
Manufacturers' new orders from U.S. Government	650	See New orders.				Defense products	650	9	22	2/77	2/73
Manufacturers' shipments to U.S. Government	689	See Shipments.				Defense products industries	658	9	...	1/72	2/73
Manufacturers' unfilled orders from U.S. Government	684	See Unfilled orders.				Ratio to shipments, defense products	683	12	26	2/77	2/73
						Ratio to shipments, defense products industries	692	12	...	11/72	2/73
Balance of payments (defense-related)						Layoff rate, defense products industries	655	8	21	10/77	4/73
Cash receipts associated with military sales contracts	696	13	27	10/77	10/73	Military personnel, Defense Department	677	10	24	9/76	8/68
Direct defense expenditures	547	13	27	10/77	10/73	Military prime contract awards—See Contract awards.					
Transfers under military agency sales contracts	546	13	27	10/77	10/73						
Budget outlays for national defense function	683	See Outlays.				Net outlays, Defense Department—See Outlays.					
						New orders, manufacturers'					
Cash receipts associated with military sales contracts	696	See Balance of payments.				Defense products	648	7	20	2/77	2/73
Civilian personnel, Defense Department	678	10	24	9/76	8/68	Defense products industries	647	7	...	11/72	2/73
Compensation						From Government, aerospace industries	650	8	20	10/77	2/73
Payrolls, aggregate weekly, defense products industries	675	10	23	10/77	4/73						
Personnel compensation, Defense Department	685	11	25	7/76	8/68	Obligations incurred, gross					
Contract awards, military prime						Defense Department, operations	619	...	15	11/77	8/68
Aircraft	626	...	16	10/76	8/68	Defense Department, procurement	621	6	15	11/77	8/68
Civilian Health and Medical Program	638	...	19	10/76	8/68	Defense Department, total	617	6	15	11/77	8/68
Combat vehicles	631	...	17	10/76	8/68	Outside Government for national defense	623	6	16	11/77	10/73
Construction	634	...	18	10/76	8/68	Obligations outstanding, gross unpaid					
Contracts under \$10,000	636	...	19	10/76	8/68	Defense Department, operations	644	...	20	6/76	8/68
Educational and nonprofit institutions	637	...	19	10/76	8/68	Obligations incurred	645	...	20	6/76	8/68
Electronic and communications equipment	630	...	17	10/76	8/68	Defense Department, procurement	646	...	20	6/76	8/68
Missile and space systems	627	...	16	10/76	8/68	Defense Department, total	643	7	20	6/76	8/68
Other hard goods	632	...	18	10/76	8/68	Operations, Defense Department					
Services	635	...	18	10/76	8/68	Net outlays	681	See Outlays.			
Ships	628	...	17	10/76	8/68	Obligations incurred	619	See Obligations incurred.			
Soft goods	633	...	18	10/76	8/68	Unpaid obligations outstanding	644	See Obligations outstanding.			
Total	625	7	16	10/76	8/68	Orders—See New orders and Unfilled orders.					
Weapons and ammunition	629	...	17	10/76	8/68	Outlays					
Work outside the United States	640	...	19	10/76	8/68	Budget outlays for national defense function	683	11	25	11/77	10/73
						Defense Department, operations	681	...	24	7/76	8/68
Defense and space equipment, output	657	See Output of defense and space equipment.				Defense Department, procurement	682	11	25	7/76	8/68
Defense Department						Defense Department, total	680	11	24	7/76	8/68
Gross obligations incurred—See Obligations incurred.						Output of defense and space equipment	657	9	22	10/77	10/73
Gross unpaid obligations outstanding—See Obligations outstanding.						Overtime hours, defense products industries	653	8	21	10/77	4/73
Military prime contract awards—See Contract awards.											
Net outlays—See Outlays.						Payrolls, aggregate weekly, defense products industries	675	See Compensation.			
Personnel compensation	685	See Compensation.				Personnel compensation, Defense Department	685	See Compensation.			
Personnel—See Civilian personnel and Military personnel.						Personnel—See Civilian personnel and Military personnel.					
Progress payments outstanding	666	See Progress payments.				Procurement, Defense Department					
Direct defense expenditures	547	See Balance of payments.				Net outlays	682	See Outlays.			
						Obligations incurred	621	See Obligations incurred.			
Employment						Unpaid obligations outstanding	645	See Obligations outstanding.			
Accession rate, defense products industries	654	See Accession rate.				Progress payments outstanding, Defense Department	666	9	22	10/77	8/68
Employment, production workers, defense products industries	671	10	23	10/77	4/73	Purchases of goods and services for national defense	264	See Gross national product.			
Employment, total, defense products industries	670	10	22	10/77	4/73						
Hours, defense products industries	673	See Hours.				Shipments, manufacturers'					
Layoff rate, defense products industries	655	See Layoff rate.				Defense products	688	12	26	2/77	2/73
Overtime hours, defense products industries	653	See Overtime hours.				Defense products industries	687	12	...	11/72	2/73
Personnel—See Civilian personnel and Military personnel.						Ratio, inventories to shipments, defense products	693	See Inventories.			
Expenditures—See Outlays.						Ratio, inventories to shipments, defense products industries	692	See Unfilled orders.			
						Ratio, unfilled orders to shipments, defense products	691	See Unfilled orders.			
Federal purchases of goods and services for national defense	264	See Gross national product.				Ratio, unfilled orders to shipments, defense products industries	690	12	26	10/77	2/73
						To Government, aerospace industries	688				
Gross national product						Transfers under military agency sales contracts	546	See Balance of payments.			
Federal purchases of goods and services for national defense	264	5	14	10/77	10/73	Unfilled orders, manufacturers'					
National defense purchases as percent of GNP	200	5	14	10/77	10/73	Defense products	661	9	22	2/77	2/73
Gross obligations incurred—See Obligations incurred.	613	5	14	10/77	10/73	Defense products industries	680	9	...	7/71	2/73
Gross unpaid obligations outstanding—See Obligations outstanding.						From Government, aerospace industries	684	9	22	10/77	2/73
						Ratio to shipments, defense products	691	12	26	2/77	2/73
						Ratio to shipments, defense products industries	690	12	...	11/72	2/73
						Unpaid obligations outstanding—See Obligations outstanding.					



